

Analytical Data Package Prepared For

# Pacific Northwest National Lab

Radiochemical Analysis By

STL Richland STLRL

*2800 G.W. Way, Richland Wa, 99354, (509)-375-3131.*

*Data Package Contains \_\_\_\_\_ Pages*

Report Nbr: 34705

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05107	I07-021	B1LNF5	J7A310377-1	JNPEH1AA	9JNPEH10	7039543
		B1LNF5	J7A310377-1	JNPEH1AC	9JNPEH10	7039542
	S07-012	B1LCH5	J7B020316-1	JNVW31AA	9JNVW310	7039534
		B1LCD8	J7B020316-2	JNVW71AA	9JNVW710	7039539
		B1LCD8	J7B020316-2	JNVW71AC	9JNVW710	7039534
		B1LP81	J7B020323-1	JNV3J1AA	9JNV3J10	7039533
	WO7-001	B1LRH3	J7B020335-1	JNV3N1AA	9JNV3N10	7039532
		B1LRH3	J7B020335-1	JNV3N1AC	9JNV3N10	7039531
		B1LP41	J7B020339-1	JNV4G1AA	9JNV4G10	7039533
	S07-001	B1LP41	J7B020339-1	JNV4G1AC	9JNV4G10	7039528
		B1LNP3	J7B020339-2	JNV4K1AA	9JNV4K10	7039528
		B1LP03	J7B050132-1	JNXLQ1AA	9JNXLQ10	7039543
		B1LP09	J7B050132-2	JNXLR1AA	9JNXLR10	7039532
		B1LP09	J7B050132-2	JNXLR1AC	9JNXLR10	7039531
		B1LP09	J7B050132-2	JNXLR1AD	9JNXLR10	7039527

Comments:

# Report Nbr: 34705

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05107	S07-001	B1LP09	J7B050132-2	JNXLR1AE	9JNXLR10	7039543
		B1LP09	J7B050132-2	JNXLR1AF	9JNXLR10	7039545
		B1LP09	J7B050132-2	JNXLR1AG	9JNXLR10	7039542
		B1LP09	J7B050132-2	JNXLR1AH	9JNXLR10	7039528
		B1LP14	J7B050132-3	JNXMG1AA	9JNXMG10	7039527
		B1LP14	J7B050132-3	JNXMG1AC	9JNXMG10	7039543
		B1LP14	J7B050132-3	JNXMG1AD	9JNXMG10	7039545
		B1LP14	J7B050132-3	JNXMG1AE	9JNXMG10	7039542
		B1LP14	J7B050132-3	JNXMG1AF	9JNXMG10	7039528
	S07-010	B1KPK0	J7B050153-1	JNXNQ1AA	9JNXNQ10	7039533
	S07-001	B1LP57	J7B050154-1	JNXNT1AA	9JNXNT10	7039533
		B1LP58	J7B050154-2	JNXN01AA	9JNXN010	7039533
		B1LPF9	J7B050154-3	JNXN21AA	9JNXN210	7039533
		B1LPF9	J7B050154-3	JNXN21AC	9JNXN210	7039543
		B1LPD1	J7B050154-4	JNXN31AA	9JNXN310	7039533
		B1LP93	J7B050158-1	JNXPG1AA	9JNXPG10	7039533
		B1LP93	J7B050158-1	JNXPG1AC	9JNXPG10	7039543
		B1LP84	J7B050158-2	JNXPQ1AA	9JNXPQ10	7039533
		B1LP84	J7B050158-2	JNXPQ1AC	9JNXPQ10	7039543
		B1LP66	J7B050158-3	JNXPW1AA	9JNXPW10	7039533
		B1LP66	J7B050158-3	JNXPW1AC	9JNXPW10	7039543
	S07-012	B1LC48	J7B050162-1	JNXRL1AA	9JNXRL10	7039543
	S07-001	B1LPC1	J7B050163-1	JNXR01AA	9JNXR010	7039533
		B1LPC1	J7B050163-1	JNXR01AC	9JNXR010	7039543

Comments:

**STL Richland**2800 George Washington Way  
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www.stl-inc.com**Certificate of Analysis**Pacific Northwest National Laboratories  
Sigma V Building  
Richland, WA 99352

March 19, 2007

Attention: Dot Stewart

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SAF Number	:	W07-001, S07-001, S07-012, S07-010, I07-021
Date SDG Closed	:	February 2, 2007
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W05107
Data Deliverable	:	45-Day / Summary

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**CASE NARRATIVE****I. Introduction**

Between January 30, 2007 and January 31, 2007, twenty water samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Pacific Northwest National Laboratories (PGW) specific IDs:

<u>PGW ID#</u>	<u>STLR ID#</u>	<u>MATRIX</u>	<u>DATE OF RECEIPT</u>
B1LNF5	JNPEH	WATER	1/31/07
B1LCH5	JNVW3	WATER	2/1/07
B1LCD8	JNVW7	WATER	2/1/07
B1LP81	JNV3J	WATER	2/1/07
B1LRH3	JNV3N	WATER	2/1/07
B1LP41	JNV4G	WATER	2/1/07
B1LNP3	JNV4R	WATER	2/1/07
B1LP03	JNXL9	WATER	2/1/07
B1LP09	JNXLR	WATER	2/1/07
B1LP14	JNXMG	WATER	2/1/07
B1KPK0	JNXNQ	WATER	2/1/07
B1LP57	JNXNT	WATER	2/2/07
B1LP58	JNXN0	WATER	2/2/07

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B1LPF9	JNXN2	WATER	2/2/07
B1LPD1	JNXN3	WATER	2/2/07
B1LP93	JNXPG	WATER	2/2/07
B1LP84	JNXPG	WATER	2/2/07
B1LP66	JNXPW	WATER	2/2/07
B1LC48	JNXRL	WATER	2/2/07
B1LPC1	JNXR0	WATER	2/2/07

## **II. Sample Receipt**

The samples were received in good condition and no anomalies were noted during check-in. Sample B1LHB1 had a coliform requested on it. It was missed in sample receiving and not given to the analyst before the holding time was up.

## **III. Analytical Results/Methodology**

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

### **Alpha Spectroscopy**

Plutonium-238, -239/240 by method RICH-RC-5010

Uranium 234, 235 and 238 by method RICH-RC-5039

### **Gas Proportional Counting**

Gross Alpha by method RICH-RC-5014

Gross Beta by method RICH-RC-5014

Strontium-90 by method RICH-RC-5006

### **Gamma Spectroscopy**

Gamma Spec (LL) by method RICH-RC-5017

Iodine-129 (LL) by method RICH-RC-5025

### **Liquid Scintillation Counting**

Technetium-99 by TEVA method RICH-RC-5065

Tritium by method RICH-RC-5007

### **Laser Induced Phosphorimetry**

Total Uranium by method RICH-RC-5058

## **IV. Quality Control**



The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

## **V. Comments**

### **Alpha Spectroscopy**

Plutonium-238, -239/240 by method RICH-RC-5010

The LCS, batch blank, samples and sample duplicate (B1LP14) results are within contractual requirements.

Uranium 234, 235 and 238 by method RICH-RC-5039

The LCS, batch blank, samples and sample duplicate (B1LCD8) results are within contractual requirements.

### **Gas Proportional Counting**

Gross Alpha by method RICH-RC-5014:

There was an obvious blank LCS switch. The error was corrected in RadCalc. Except as noted, the LCS, batch blank, samples and sample duplicate (B1LRH3) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:

The LCS, batch blank, samples and sample duplicate (B1LP09) results are within contractual requirements.

Strontium-90 by method RICH-RC-5006

The LCS, batch blank, samples and sample duplicate (B1LP09) results are within contractual requirements.

### **Gamma Spectroscopy**

Gamma Spec (LL) by method RICH-RC-5017:

The LCS, batch blank, samples and sample duplicate (B1LP09) results are within contractual requirements.

Iodine-129 (LL) by method RICH-RC-5025:

In the original analysis the LCS had a low recovery. It was recounted with good results. Except as noted, the LCS, batch blank, samples and sample duplicate (B1LC48) results are within contractual requirements.

### **Liquid Scintillation Counting**

Technetium-99 by TEVA method RICH-RC-5065:

The LCS, batch blank, samples, sample duplicate (B1LP14), and sample matrix spike (B1LP09) results are within contractual requirements.

Pacific Northwest National Laboratories  
March 19, 2007

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Tritium by method RICH-RC-5007:

The LCS, batch blank, samples and sample duplicate (B1LPC1) results are within contractual requirements.

**Total Uranium**

Total Uranium by method RICH-RC-5058:

The LCS, batch blank, samples, sample duplicate (B1LCD8), and sample matrix spike (B1LCH5) results are within contractual requirements.

I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the following signature.

Reviewed and approved:



Sherryl A. Adam  
Project Manager

## Drinking Water Method Cross References

DRINKING WATER ASTM METHOD CROSS REFERENCES		
Referenced Method	Isotope(s)	STL Richland's SOP number
EPA 901.1	Cs-134, I-131	RICH-RC-5017
EPA 900.0	Alpha & Beta	RICH-RC-5014
EPA 903.1	Ra-226	RICH-RC-5005
EPA 904.0	Ra-228	RICH-RC-5005
EPA 905.0	Sr89/90	RICH-RC-5006
ASTM D2460	Total Radium	RICH-RC-5027
Standard Method 7500-U-C & ASTM D5174	Uranium	RICH-RC-5058
EPA 906.0	Tritium	RICH-RC-5007
NOTE:		
The Gross Alpha LCS is prepared with Am-241 (unless otherwise specified in the case narrative)		
The Gross Beta LCS is prepared with Sr/Y-90 (unless otherwise specified in the case narrative)		

## Uncertainty Estimation

STL Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship,  $R = \text{constants} * f(x,y,z,...)$ . The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties ( $u_i$ ) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty ( $u_c$ ) multiplied by the coverage factor (1,2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value ( $S/\sqrt{n}$ ), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

The derivation of the general "Law of Propagation of Errors" equations and specific example are available on request.

## Report Definitions

<b>Action Lev</b>	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
<b>Batch</b>	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
<b>Bias</b>	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
<b>COC No</b>	Chain of Custody Number assigned by the Client or STL Richland.
<b>Count Error (#s)</b>	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
<b>Total Uncert (#s) <i>u<sub>c</sub> - Combined Uncertainty.</i></b>	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, <i>u<sub>c</sub> the combined uncertainty</i> . The uncertainty is absolute and in the same units as the result.
<b>(#s), Coverage Factor</b>	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
<b>CRDL (RL)</b>	Contractual Required Detection Limit as defined in the Client's Statement Of Work or STL Richland "default" nominal detection limit. Often referred to the reporting level (RL)
<b>Lc</b>	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. $Lc = (1.645 * \sqrt{2 * (BkgrndCnt / BkgrndCntMin) / SCntMin}) * (ConvFct / (Eff * Yld * Abn * Vol) * IngrFct)$ . For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
<b>Lot-Sample No</b>	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
<b>MDC MDA</b>	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. $MDC = (4.65 * \sqrt{((BkgrndCnt / BkgrndCntMin) / SCntMin) + 2.71 / SCntMin}) * (ConvFct / (Eff * Yld * Abn * Vol) * IngrFct)$ . For LSC methods the batch blank is used as a measure of the background variability.
<b>Primary Detector</b>	The instrument identifier associated with the analysis of the sample aliquot.
<b>Ratio U-234/U-238</b>	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
<b>Rst/MDC</b>	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
<b>Rst/TotUcert</b>	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
<b>Report DB No</b>	Sample Identifier used by the report system. The number is based upon the first five digits of the <b>Work Order</b> Number.
<b>RER</b>	The equation Replicate Error Ratio = $(S - D) / [\sqrt{TPUs^2 + TPUD^2}]$ as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUD is the total uncertainty of the duplicate sample.
<b>SDG</b>	Sample Delivery Group Number assigned by the Client or assigned by STL Richland upon sample receipt.
<b>Sum Rpt Alpha Spec Rst(s)</b>	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
<b>Work Order</b>	The LIMS software assign test specific identifier.
<b>Yield</b>	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

3/19/2007 9:07:35 AM

## STL Richland Report

Lab Code: STLRL

FormNbr: R      FormatType: FEAD      Version: 05      Rpt Nbr: 34705      File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JNPEH10	B1LNF5		MW6-SBB-A1	I07-021	W05107					01/31/2007 09:38				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7039543	I-129L	15046-84-1	3.24E-03	pCi/L	1.4E-01	1.4E-01	U	2.58E-01	98.4	I129LL_SEP_LEPS	3.9415E+00	L	02/26/2007 16:31	I
7039542	SR-90	10098-97-2	1.48E-02	pCi/L	1.0E-01	2.4E-01	U	5.19E-01	85.7	SRISO_SEP_PRE	1.0006E+00	L	02/28/2007 06:50	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JNV3J10	B1LP81		MW6-SBB-A1	S07-001	W05107					02/01/2007 10:49				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7039533	H-3	10028-17-8	4.89E+04	pCi/L	7.2E+02	2.0E+03		3.03E+02	100.0	906.0_H3_LSC	5.00E-03	L	02/22/2007 01:48	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JNV3N10	B1LRH3		MW6-SBB-A1	WO7-001	W05107					02/01/2007 12:16				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7039532	ALPHA	12587-46-1	1.94E+00	pCi/L	1.2E+00	1.2E+00		1.30E+00	100.0	9310_ALPHABETA	2.004E-01	L	02/26/2007 20:04	I
7039531	BETA	12587-47-2	7.36E+00	pCi/L	1.8E+00	2.0E+00		2.95E+00	100.0	9310_ALPHABETA	2.014E-01	L	02/26/2007 20:25	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JNV4G10	B1LP41		MW6-SBB-A1	S07-001	W05107					02/01/2007 10:11				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7039533	H-3	10028-17-8	7.41E+03	pCi/L	3.0E+02	4.4E+02		3.04E+02	100.0	906.0_H3_LSC	5.00E-03	L	02/22/2007 03:10	I
7039528	TC-99	14133-76-7	1.59E+02	pCi/L	7.9E+00	1.7E+01		9.86E+00	100.0	TC99_ETVDSK_LS	1.254E-01	L	02/20/2007 10:37	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JNV4K10	B1LNP3		MW6-SBB-A1	S07-001	W05107					02/01/2007 10:57				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7039528	TC-99	14133-76-7	4.21E+00	pCi/L	4.3E+00	6.4E+00	U	9.99E+00	100.0	TC99_ETVDSK_LS	1.245E-01	L	02/20/2007 10:37	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JNVW310	B1LCH5		MW6-SBB-A1	S07-012	W05107					02/01/2007 12:52				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7039534	Uranium	7440-61-1	1.11E+02	ug/L	1.4E+01	1.4E+01		7.88E-02		UTOT_KPA	2.66E-02	ML	02/28/2007 16:38	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				

STL Richland

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

rptFeadRadSummaryEdd v3.48

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

3/19/2007 9:07:35 AM

## STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34705 File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

9JNVW710	B1LCD8		MW6-SBB-A1	S07-012	W05107								02/01/2007 12:04	
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7039539	U-234	13966-29-5	2.72E+01	pCi/L	2.0E+00	5.0E+00		1.70E-01	92.3	UIISO_PLATE_AEA	2.015E-01	L	02/23/2007 18:55	I
7039539	U-235	15117-96-1	9.92E-01	pCi/L	3.8E-01	4.1E-01		1.70E-01	92.3	UIISO_PLATE_AEA	2.015E-01	L	02/23/2007 18:55	I
7039539	U-238	U-238	2.56E+01	pCi/L	1.9E+00	4.7E+00		1.70E-01	92.3	UIISO_PLATE_AEA	2.015E-01	L	02/23/2007 18:55	I
7039534	Uranium	7440-61-1	7.02E+01	ug/L	8.5E+00	8.5E+00		8.25E-02		UTOT_KPA	2.54E-02	ML	02/28/2007 16:49	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JNXLQ10	B1LP03		MW6-SBB-A1	S07-001	W05107					02/01/2007 12:16				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7039543	I-129L	15046-84-1	4.51E-02	pCi/L	1.2E-01	1.2E-01	U	2.32E-01	99.5	I129LL_SEP_LEPS	3.8987E+00	L	02/26/2007 16:31	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JNXLR10	B1LP09		MW6-SBB-A1	S07-001	W05107					02/01/2007 09:01				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7039532	ALPHA	12587-46-1	4.24E+00	pCi/L	1.9E+00	2.2E+00		1.74E+00	100.0	9310_ALPHABETA	2.034E-01	L	02/26/2007 20:04	I
7039531	BETA	12587-47-2	3.84E+01	pCi/L	3.1E+00	5.8E+00		2.80E+00	100.0	9310_ALPHABETA	2.001E-01	L	02/26/2007 20:25	I
7039527	BE-7	13966-02-4	9.03E+00	pCi/L	2.2E+01	2.2E+01	U	4.27E+01		GAMMALL_GS	1.9562E+00	L	02/22/2007 08:43	I
7039527	CO-60	10198-40-0	1.78E+00	pCi/L	2.5E+00	2.5E+00	U	5.64E+00		GAMMALL_GS	1.9562E+00	L	02/22/2007 08:43	I
7039527	CS-134	13967-70-9	-1.30E-01	pCi/L	2.5E+00	2.5E+00	U	4.68E+00		GAMMALL_GS	1.9562E+00	L	02/22/2007 08:43	I
7039527	CS-137	10045-97-3	8.68E-01	pCi/L	2.4E+00	2.4E+00	U	4.65E+00		GAMMALL_GS	1.9562E+00	L	02/22/2007 08:43	I
7039527	EU-152	14683-23-9	-2.13E+00	pCi/L	6.1E+00	6.1E+00	U	1.07E+01		GAMMALL_GS	1.9562E+00	L	02/22/2007 08:43	I
7039527	EU-154	15585-10-1	-2.64E+00	pCi/L	7.9E+00	7.9E+00	U	1.44E+01		GAMMALL_GS	1.9562E+00	L	02/22/2007 08:43	I
7039527	EU-155	14391-16-3	-2.45E+00	pCi/L	4.7E+00	4.7E+00	U	7.92E+00		GAMMALL_GS	1.9562E+00	L	02/22/2007 08:43	I
7039527	K-40	13966-00-2	-1.08E+00	pCi/L	4.8E+01	4.8E+01	U	1.10E+02		GAMMALL_GS	1.9562E+00	L	02/22/2007 08:43	I
7039527	RU-106	13967-48-1	-1.48E+01	pCi/L	2.3E+01	2.3E+01	U	3.85E+01		GAMMALL_GS	1.9562E+00	L	02/22/2007 08:43	I
7039527	SB-125	14234-35-6	3.73E+00	pCi/L	5.1E+00	5.1E+00	U	1.02E+01		GAMMALL_GS	1.9562E+00	L	02/22/2007 08:43	I
7039543	I-129L	15046-84-1	1.38E+00	pCi/L	3.5E-01	3.5E-01		2.57E-01	91.6	I129LL_SEP_LEPS	3.9082E+00	L	02/26/2007 18:17	I
7039545	PU-238	13981-16-3	5.07E-02	pCi/L	1.8E-01	1.8E-01	U	4.77E-01	38.6	PUISO_PLATE_AE	1.997E-01	L	02/20/2007 18:39	I
7039545	PU-239	PU-239/240	8.44E-02	pCi/L	1.7E-01	1.7E-01	U	4.04E-01	38.6	PUISO_PLATE_AE	1.997E-01	L	02/20/2007 18:39	I
7039542	SR-90	10098-97-2	-2.94E-02	pCi/L	2.1E-01	2.1E-01	U	4.60E-01	97.1	SRISO_SEP_PRE	1.008E+00	L	02/28/2007 06:50	I
7039528	TC-99	14133-76-7	1.04E+02	pCi/L	6.9E+00	1.3E+01		9.85E+00	100.0	TC99_ETVDSK_LS	1.253E-01	L	02/20/2007 10:37	I

STL Richland

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

3/19/2007 9:07:35 AM

## STL Richland Report

Lab Code: STLRL

FormNbr: R      FormatType: FEAD      Version: 05      Rpt Nbr: 34705      File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JNXMG10	B1LP14		MW6-SBB-A1	S07-001	W05107					02/01/2007 10:15				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7039527	BE-7	13966-02-4	-2.87E+00	pCi/L	1.7E+01	1.7E+01	U	3.14E+01		GAMMALL_GS	2.0077E+00	L	02/22/2007 08:48	I
7039527	CO-60	10198-40-0	-5.98E-01	pCi/L	1.6E+00	1.6E+00	U	2.93E+00		GAMMALL_GS	2.0077E+00	L	02/22/2007 08:48	I
7039527	CS-134	13967-70-9	1.06E+00	pCi/L	2.2E+00	2.2E+00	U	4.41E+00		GAMMALL_GS	2.0077E+00	L	02/22/2007 08:48	I
7039527	CS-137	10045-97-3	1.12E+01	pCi/L	4.5E+00	4.5E+00		3.05E+00		GAMMALL_GS	2.0077E+00	L	02/22/2007 08:48	I
7039527	EU-152	14683-23-9	-4.57E+00	pCi/L	5.0E+00	5.0E+00	U	8.04E+00		GAMMALL_GS	2.0077E+00	L	02/22/2007 08:48	I
7039527	EU-154	15585-10-1	-2.70E-01	pCi/L	4.7E+00	4.7E+00	U	9.45E+00		GAMMALL_GS	2.0077E+00	L	02/22/2007 08:48	I
7039527	EU-155	14391-16-3	6.94E-01	pCi/L	3.3E+00	3.3E+00	U	6.07E+00		GAMMALL_GS	2.0077E+00	L	02/22/2007 08:48	I
7039527	K-40	13966-00-2	1.39E+01	pCi/L	3.0E+01	3.0E+01	U	6.86E+01		GAMMALL_GS	2.0077E+00	L	02/22/2007 08:48	I
7039527	RU-106	13967-48-1	-2.14E+01	pCi/L	1.8E+01	1.8E+01	U	2.71E+01		GAMMALL_GS	2.0077E+00	L	02/22/2007 08:48	I
7039527	SB-125	14234-35-6	-3.55E+00	pCi/L	4.7E+00	4.7E+00	U	7.65E+00		GAMMALL_GS	2.0077E+00	L	02/22/2007 08:48	I
7039543	I-129L	15046-84-1	7.75E-01	pCi/L	2.8E-01	2.8E-01	U	4.18E-01	98.4	I129LL_SEP_LEPS	3.9258E+00	L	02/26/2007 18:18	I
7039545	PU-238	13981-16-3	0.00E+00	pCi/L	9.7E-02	9.7E-02	U	2.28E-01	68.0	PUISO_PLATE_AE	2.036E-01	L	02/20/2007 18:39	I
7039545	PU-239	PU-239/240	2.85E-02	pCi/L	9.9E-02	9.9E-02	U	2.69E-01	68.0	PUISO_PLATE_AE	2.036E-01	L	02/20/2007 18:39	I
7039542	SR-90	10098-97-2	5.47E-02	pCi/L	1.9E-01	2.1E-01	U	4.46E-01	93.0	SRISO_SEP_PRE	1.0065E+00	L	02/28/2007 06:51	I
7039528	TC-99	14133-76-7	2.13E+02	pCi/L	8.9E+00	2.0E+01		9.84E+00	100.0	TC99_ETVDSK_LS	1.257E-01	L	02/20/2007 10:37	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JNXN010	B1LP58		MW6-SBB-A1	S07-001	W05107					02/02/2007 08:59				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7039533	H-3	10028-17-8	-2.46E+01	pCi/L	1.2E+02	1.4E+02	U	3.02E+02	100.0	906.0 H3 LSC	5.00E-03	L	02/22/2007 07:15	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JNXN210	B1LPF9		MW6-SBB-A1	S07-001	W05107					02/02/2007 09:53				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7039533	H-3	10028-17-8	2.85E+03	pCi/L	2.1E+02	2.6E+02		3.03E+02	100.0	906.0_H3_LSC	5.00E-03	L	02/22/2007 08:37	I
7039543	I-129L	15046-84-1	1.78E-01	pCi/L	1.2E-01	1.2E-01	U	2.66E-01	99.5	I129LL_SEP_LEPS	3.9046E+00	L	02/26/2007 18:18	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JNXN310	B1LPD1		MW6-SBB-A1	S07-001	W05107					02/02/2007 12:07

STL Richland

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.  
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).  
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

3/19/2007 9:07:35 AM

## STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34705 File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7039533	H-3	10028-17-8	-1.94E+01	pCi/L	1.2E+02	1.4E+02	U	3.04E+02	100.0	906.0_H3_LSC	5.00E-03	L	02/22/2007 09:59	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9JNXNQ10	B1KPK0		MW6-SBB-A1	S07-010	W05107					02/01/2007 09:23				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7039533	H-3	10028-17-8	-1.08E+02	pCi/L	1.2E+02	1.4E+02	U	3.04E+02	100.0	906.0_H3_LSC	5.00E-03	L	02/22/2007 04:32	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9JNXNT10	B1LP57		MW6-SBB-A1	S07-001	W05107					02/02/2007 08:59				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7039533	H-3	10028-17-8	-2.39E+01	pCi/L	1.2E+02	1.4E+02	U	3.02E+02	100.0	906.0_H3_LSC	5.00E-03	L	02/22/2007 05:53	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9JNXPG10	B1LP93		MW6-SBB-A1	S07-001	W05107					02/02/2007 08:46				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7039533	H-3	10028-17-8	8.71E+04	pCi/L	9.5E+02	3.4E+03		3.04E+02	100.0	906.0_H3_LSC	5.00E-03	L	02/22/2007 11:20	I
7039543	I-129L	15046-84-1	1.22E-01	pCi/L	1.7E-01	1.7E-01	U	3.33E-01	96.8	I129LL_SEP_LEPS	3.8771E+00	L	02/26/2007 20:02	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9JNXPD10	B1LP84		MW6-SBB-A1	S07-001	W05107					02/02/2007 09:57				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7039533	H-3	10028-17-8	8.11E+04	pCi/L	9.2E+02	3.2E+03		3.02E+02	100.0	906.0_H3_LSC	5.00E-03	L	02/22/2007 12:42	I
7039543	I-129L	15046-84-1	1.73E+00	pCi/L	4.5E-01	4.5E-01		2.66E-01	99.7	I129LL_SEP_LEPS	3.8513E+00	L	02/26/2007 20:03	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9JNXPW10	B1LP66		MW6-SBB-A1	S07-001	W05107					02/02/2007 10:38				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7039533	H-3	10028-17-8	6.27E+04	pCi/L	8.1E+02	2.5E+03		3.03E+02	100.0	906.0_H3_LSC	5.00E-03	L	02/22/2007 18:09	I
7039543	I-129L	15046-84-1	3.17E+00	pCi/L	5.1E-01	5.1E-01		3.03E-01	98.6	I129LL_SEP_LEPS	3.8722E+00	L	02/26/2007 20:03	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/Solids%*	Distilled Volume	Sample On Date:	Collection Date:				
9JNXR010	B1LPC1		MW6-SBB-A1	S07-001	W05107					02/02/2007 10:02				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7039533	H-3	10028-17-8	4.83E+04	pCi/L	7.1E+02	2.0E+03		3.03E+02	100.0	906.0_H3_LSC	5.00E-03	L	02/22/2007 19:31	I

STL Richland

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

rptFeadRadSummaryEdd v3.48

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.



3/19/2007 9:07:36 AM

## STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34705 File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

7039543	I-129L	15046-84-1	2.53E+00	pCi/L	5.0E-01	5.0E-01	2.73E-01	97.6	I129LL_SEP_LEPS	3.9351E+00	L	02/26/2007 22:27	I	
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:				
9JNXRL10	B1LC48		MW6-SBB-A1	S07-012	W05107					02/02/2007 11:52				
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7039543	I-129L	15046-84-1	4.55E-02	pCi/L	1.3E-01	1.3E-01	U	2.59E-01	99.2	I129LL_SEP_LEPS	3.8216E+00	L	02/26/2007 22:25	I

Monday, March 19, 2007

# STL Richland QC Blank Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6D21AB

Sdg/Rept Nbr: W05107

34705

Collection Date: 02/01/2007 09:01

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BLK

Received Date: 02/01/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								AU	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7039528	TC-99	-1.49E-01	pCi/L	6.1E+00	U	9.89E+00	100.0		TC99_ETVDSK	1.261E-01	02/20/2007				D
BLK	14133-76-7			4.1E+00						L	10:37				

Monday, March 19, 2007

## STL Richland QC Blank Report

Lab Code: STLRRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6D61AB

Sdg/Rept Nbr: W05107

34705

Collection Date: 02/01/2007 09:01

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BLK

Received Date: 02/01/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
		MW6-SBB-A19981																AW		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7039531	BETA	8.76E-01	pCi/L	1.2E+00	U	2.49E+00	100.0		9310_ALPHAB	2.016E-01	02/26/2007				D						
BLK	12587-47-2			1.2E+00						L	20:25										

Monday, March 19, 2007

## STL Richland QC Blank Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6DR1AB

Sdg/Rept Nbr: W05107

34705

Collection Date: 02/01/2007 09:01

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BLK

Received Date: 02/01/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
	MW6-SBB-A19981								AY	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7039527 BLK	BE-7 13966-02-4	-9.14E+00	pCi/L	2.0E+01 2.0E+01	U	3.45E+01			GAMMALL_GS	1.995E+00 L	02/22/2007 08:49				D
7039527 BLK	CO-60 10198-40-0	-1.36E+00	pCi/L	2.8E+00 2.8E+00	U	4.77E+00			GAMMALL_GS	1.995E+00 L	02/22/2007 08:49				D
7039527 BLK	CS-134 13967-70-9	-1.62E+00	pCi/L	2.4E+00 2.4E+00	U	4.05E+00			GAMMALL_GS	1.995E+00 L	02/22/2007 08:49				D
7039527 BLK	CS-137 10045-97-3	4.62E-01	pCi/L	2.4E+00 2.4E+00	U	4.58E+00			GAMMALL_GS	1.995E+00 L	02/22/2007 08:49				D
7039527 BLK	EU-152 14683-23-9	-9.56E-01	pCi/L	5.6E+00 5.6E+00	U	1.00E+01			GAMMALL_GS	1.995E+00 L	02/22/2007 08:49				D
7039527 BLK	EU-154 15585-10-1	1.29E+00	pCi/L	6.6E+00 6.6E+00	U	1.35E+01			GAMMALL_GS	1.995E+00 L	02/22/2007 08:49				D
7039527 BLK	EU-155 14391-16-3	1.33E+00	pCi/L	5.1E+00 5.1E+00	U	9.43E+00			GAMMALL_GS	1.995E+00 L	02/22/2007 08:49				D
7039527 BLK	K-40 13966-00-2	-3.81E+01	pCi/L	5.4E+01 5.4E+01	U	1.21E+02			GAMMALL_GS	1.995E+00 L	02/22/2007 08:49				D
7039527 BLK	RU-106 13967-48-1	-1.57E+01	pCi/L	2.1E+01 2.1E+01	U	3.32E+01			GAMMALL_GS	1.995E+00 L	02/22/2007 08:49				D
7039527 BLK	SB-125 14234-35-6	3.61E+00	pCi/L	5.8E+00 5.8E+00	U	1.11E+01			GAMMALL_GS	1.995E+00 L	02/22/2007 08:49				D

Monday, March 19, 2007

## STL Richland QC Blank Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6E81AB

Sdg/Rept Nbr: W05107

34705

Collection Date: 02/01/2007 12:04

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BLK

Received Date: 02/01/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
		MW6-SBB-A19981																BA		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7039539 BLK	U-234 13966-29-5	2.93E-02	pCi/L	7.5E-02 7.5E-02	U	1.76E-01	89.4		UIISO_PLATE_	2.012E-01 L	02/23/2007 22:47				D						
7039539 BLK	U-235 15117-96-1	3.67E-02	pCi/L	7.5E-02 7.5E-02	U	1.76E-01	89.4		UIISO_PLATE_	2.012E-01 L	02/23/2007 22:47				D						
7039539 BLK	U-238 U-238	0.00E+00	pCi/L	7.5E-02 7.5E-02	U	1.76E-01	89.4		UIISO_PLATE_	2.012E-01 L	02/23/2007 22:47				D						

Monday, March 19, 2007

## STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6EA1AB

Sdg/Rept Nbr: W05107 34705

Collection Date: 02/01/2007 12:16

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BLK

Received Date: 02/01/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BC	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7039532	ALPHA	5.15E-02	pCi/L	3.0E-01	U	8.65E-01	100.0		9310_ALPHAB	1.993E-01	02/26/2007				D
BLK	12587-46-1			3.0E-01						L	21:12				

Monday, March 19, 2007

## STL Richland QC Blank Report

Lab Code: STLRRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\eddd\FeadIV\Rad\W05107.Edd, h:\Reportdb\eddd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6ED1AB

Sdg/Rept Nbr: W05107

34705

Collection Date: 02/02/2007 10:02

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BLK

Received Date: 02/02/2007

SAF Nbr		Contract Nbr		Test User	Case Nbr		SAS Nbr	Suffix	Decant	Distilled Volume		File Id		FSuffix	RTyp
		MW6-SBB-A19981												BE	H
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7039533	H-3	6.97E+01	pCi/L	1.4E+02	U	3.04E+02	100.0		906.0_H3_LSC	5.00E-03	02/21/2007				D
BLK	10028-17-8			1.3E+02						L	23:04				

Monday, March 19, 2007

## STL Richland QC Blank Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6ED1DX

Sdg/Rept Nbr: W05107

34705

Collection Date: 02/02/2007 10:02

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BLK

Received Date: 02/02/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BG	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7039533	H-3	3.38E+01	pCi/L	1.4E+02	U	3.05E+02	100.0		906.0_H3_LSC	5.00E-03	02/22/2007				D
BLK	10028-17-8			1.3E+02						L	15:25				



Monday, March 19, 2007

## STL Richland QC Blank Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6EX1AB

Sdg/Rept Nbr: W05107

34705

Collection Date: 02/01/2007 12:52

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BLK

Received Date: 02/01/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
		MW6-SBB-A19981																BI		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7039534	Uranium	0.00E+00	ug/L	0.0E+00	U	2.10E-01			UTOT_KPA	2.50E-02	02/28/2007				D						
BLK	7440-61-1			0.0E+00						ML	16:31										

Monday, March 19, 2007

## STL Richland QC Blank Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6FA1AB

Sdg/Rept Nbr: W05107

34705

Collection Date: 02/01/2007 09:01

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BLK

Received Date: 02/01/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
		MW6-SBB-A19981																BL		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7039542	SR-90	7.41E-02	pCi/L	2.3E-01	U	4.95E-01	87.3		SRISO_SEP_P	1.0005E+00	02/28/2007				D						
BLK	10098-97-2			1.8E-01						L	06:51										

Monday, March 19, 2007

## STL Richland QC Blank Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6FC1AB

Sdg/Rept Nbr: W05107 34705

Collection Date: 02/02/2007 11:52

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BLK

Received Date: 02/02/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
	MW6-SBB-A19981								BN	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7039543	I-129L	9.71E-03	pCi/L	1.1E-01	U	2.09E-01	96.2		I129LL_SEP_L	3.997E+00	02/27/2007				D
BLK	15046-84-1			1.1E-01						L	05:14				

Monday, March 19, 2007

## STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6FE1AB

Sdg/Rept Nbr: W05107

34705

Collection Date: 02/01/2007 10:15

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BLK

Received Date: 02/01/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BQ	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7039545 BLK	PU-238 13981-16-3	0.00E+00	pCi/L	1.2E-01 1.2E-01	U	2.77E-01	59.6		PUIISO_PLATE	2.002E-01 L	02/20/2007 18:40				D
7039545 BLK	PU-239 PU-239/240	-1.16E-02	pCi/L	1.2E-01 1.2E-01	U	2.77E-01	59.6		PUIISO_PLATE	2.002E-01 L	02/20/2007 18:40				D

Monday, March 19, 2007

## STL Richland QC Control Sample Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6D21CS

Sdg/Rept Nbr: W05107

34705

Collection Date: 02/01/2007 09:01

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BS

Received Date: 02/01/2007

SAF Nbr		Contract Nbr		Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume		File Id	FSuffix	RTyp		
		MW6-SBB-A19981										AV	H		
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7039528	TC-99	5.15E+02	pCi/L	4.1E+01		9.79E+00	100.0	5.41E+02	TC99_ETVDSK	1.261E-01	02/20/2007			75	D
BS	14133-76-7			1.3E+01				95.2		L	10:38			125	

Monday, March 19, 2007

## STL Richland QC Control Sample Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6D61CS

Sdg/Rept Nbr: W05107 34705

Collection Date: 02/01/2007 09:01

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BS

Received Date: 02/01/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								AX	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7039531	BETA	2.20E+01	pCi/L	3.7E+00		2.53E+00	100.0	2.27E+01	9310_ALPHAB	2.006E-01	02/26/2007			70	D
BS	12587-47-2			2.3E+00				97.2		L	20:25			130	

Monday, March 19, 2007

## STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6DR1CS

Sdg/Rept Nbr: W05107

34705

Collection Date: 02/01/2007 09:01

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BS

Received Date: 02/01/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
		MW6-SBB-A19981																AZ		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7039527 BS	CO-60 10198-40-0	3.56E+01	pCi/L	7.7E+00 7.7E+00		4.68E+00		3.82E+01 93.1	GAMMALL_GS	2.0015E+00 L	02/22/2007 08:49			75 125	D						
7039527 BS	CS-137 10045-97-3	2.70E+01	pCi/L	7.1E+00 7.1E+00		5.06E+00		2.49E+01 108.7	GAMMALL_GS	2.0015E+00 L	02/22/2007 08:49			70 130	D						
7039527 BS	EU-152 14683-23-9	6.20E+01	pCi/L	1.7E+01 1.7E+01	U	2.52E+01		7.70E+01 80.5	GAMMALL_GS	2.0015E+00 L	02/22/2007 08:49			70 130	D						

Monday, March 19, 2007

## STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6E81CS

Sdg/Rept Nbr: W05107

34705

Collection Date: 02/01/2007 12:04

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BS

Received Date: 02/01/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BB	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7039539	U-234	9.15E+00	pCi/L	1.9E+00		1.58E-01	99.6	8.64E+00	UIISO_PLATE_	2.001E-01	02/23/2007			75	D
BS	13966-29-5			1.1E+00				105.9		L	22:47			125	
7039539	U-238	9.65E+00	pCi/L	2.0E+00		1.58E-01	99.6	9.04E+00	UIISO_PLATE_	2.001E-01	02/23/2007			75	D
BS	U-238			1.1E+00				106.7		L	22:47			125	



Monday, March 19, 2007

## STL Richland QC Control Sample Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6EA1CS

Sdg/Rept Nbr: W05107

34705

Collection Date: 02/01/2007 12:16

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BS

Received Date: 02/01/2007

SAF Nbr		Contract Nbr		Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp			
		MW6-SBB-A19981									BD	H			
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7039532	ALPHA	2.05E+01	pCi/L	5.6E+00		1.10E+00	100.0	2.26E+01	9310_ALPHAB	1.997E-01	02/26/2007			70	D
BS	12587-46-1			2.9E+00				90.8		L	20:04			130	

Monday, March 19, 2007

## STL Richland QC Control Sample Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6ED1CS

Sdg/Rept Nbr: W05107

34705

Collection Date: 02/02/2007 10:02

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BS

Received Date: 02/02/2007

SAF Nbr		Contract Nbr		Test User	Case Nbr		SAS Nbr	Suffix	Decant	Distilled Volume	File Id		FSuffix	RTyp	
		MW6-SBB-A19981											BF	H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7039533	H-3	2.44E+03	pCi/L	2.4E+02		3.04E+02	100.0	2.71E+03	906.0_H3_LSC	5.00E-03	02/22/2007			75	D
BS	10028-17-8			2.0E+02				89.8		L	00:26			125	

Monday, March 19, 2007

## STL Richland QC Control Sample Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6ED1EM

Sdg/Rept Nbr: W05107

34705

Collection Date: 02/02/2007 10:02

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BS

Received Date: 02/02/2007

SAF Nbr		Contract Nbr		Test User	Case Nbr		SAS Nbr	Suffix	Decant	Distilled Volume		File Id		FSuffix	RTyp
		MW6-SBB-A19981												BH	H
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7039533	H-3	2.54E+03	pCi/L	2.5E+02		3.08E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	02/22/2007			75	D
BS	10028-17-8			2.0E+02				93.7		L	16:47			125	

Monday, March 19, 2007

## STL Richland QC Control Sample Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6EX1CS

Sdg/Rept Nbr: W05107

34705

Collection Date: 02/01/2007 12:52

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BS

Received Date: 02/01/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BJ	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7039534	Uranium	3.26E+01	ug/L	4.0E+00		8.19E-02		3.51E+01	UTOT_KPA	2.56E-02	02/28/2007			75	D
BS	7440-61-1			4.0E+00				92.8		ML	16:35			125	

Monday, March 19, 2007

## STL Richland QC Control Sample Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6EX1DS

Sdg/Rept Nbr: W05107 34705

Collection Date: 02/01/2007 12:52

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BS

Received Date: 02/01/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
	MW6-SBB-A19981								BK	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7039534	Uranium	3.55E+00	ug/L	3.6E-01		8.09E-02		3.50E+00	UTOT_KPA	2.59E-02	02/28/2007			75	D
BS	7440-61-1			3.6E-01				101.4		ML	16:37			125	

Monday, March 19, 2007

# STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6FA1CS

Sdg/Rept Nbr: W05107 34705

Collection Date: 02/01/2007 09:01

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BS

Received Date: 02/01/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
	MW6-SBB-A19981								BM	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7039542	SR-90	1.31E+01	pCi/L	2.0E+00		4.23E-01	93.0	1.36E+01	SRISO_SEP_P	1.004E+00	02/28/2007			70	D
BS	10098-97-2			6.7E-01				96.3		L	06:51			130	

Monday, March 19, 2007

## STL Richland QC Control Sample Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6FC1CS

Sdg/Rept Nbr: W05107

34705

Collection Date: 02/02/2007 11:52

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BS

Received Date: 02/02/2007

SAF Nbr		Contract Nbr		Test User	Case Nbr		SAS Nbr	Suffix	Decant	Distilled Volume		File Id		FSuffix	RTyp
		MW6-SBB-A19981												BO	H
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7039543	I-129L	6.76E+00	pCi/L	9.4E-01		3.52E-01	97.5	9.72E+00	I129LL_SEP_L	3.9643E+00	02/27/2007			70	D
BS	15046-84-1			9.4E-01				69.6		L	05:14			130	

Monday, March 19, 2007

## STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6FC2CS

Sdg/Rept Nbr: W05107 34705

Collection Date: 02/02/2007 11:52

Client Id: NA

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BS

Received Date: 02/02/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BP	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7039543	I-129L	8.49E+00	pCi/L	1.1E+00		3.50E-01	97.5	9.72E+00	I129LL_SEP_L	3.9643E+00	03/01/2007			70	D
BS	15046-84-1			1.1E+00				87.3		L	10:34			130	



Monday, March 19, 2007

## STL Richland QC Control Sample Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JN6FE1CS

Sdg/Rept Nbr: W05107

34705

Collection Date: 02/01/2007 10:15

Client Id: NA

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: BS

Received Date: 02/01/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
	MW6-SBB-A19981								BR	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7039545	PU-239	4.40E+00	pCi/L	1.4E+00		3.51E-01	47.3	4.49E+00	PUISO_PLATE	2.029E-01	02/20/2007			75	D
BS	PU-239/240			1.1E+00				98.0		L	18:40			125	

Monday, March 19, 2007

## STL Richland QC Duplicate Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JNV3N1DR

Sdg/Rept Nbr: W05107

34705

Collection Date: 02/01/2007 12:16

Client Id: B1LRH3

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: DUP

Received Date: 02/01/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
WO7-001		MW6-SBB-A19981																BS		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7039532	ALPHA	2.46E+00	pCi/L	1.5E+00		1.53E+00	100.0		9310_ALPHAB	2.013E-01	02/26/2007	23.6	0.5		D						
DUP	12587-46-1	1.94E+00		1.3E+00						L	20:04	20.0	3								

Monday, March 19, 2007

## STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JNVW71DR

Sdg/Rept Nbr: W05107 34705

Collection Date: 02/01/2007 12:04

Client Id: B1LCD8

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: DUP

Received Date: 02/01/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
S07-012		MW6-SBB-A19981																BU		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7039534	Uranium	7.01E+01	ug/L	8.5E+00		8.35E-02			UTOT_KPA	2.51E-02	02/28/2007	.1	0.		D						
DUP	7440-61-1	7.02E+01		8.5E+00						ML	16:51	20.0	3								

Monday, March 19, 2007

## STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JNVW71ER

Sdg/Rept Nbr: W05107 34705

Collection Date: 02/01/2007 12:04

Client Id: B1LCD8

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: DUP

Received Date: 02/01/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
S07-012		MW6-SBB-A19981																BV		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7039539	U-234	2.60E+01	pCi/L	4.7E+00		1.62E-01	96.4		UIISO_PLATE_	2.013E-01	02/23/2007	4.8	0.4		D						
DUP	13966-29-5	2.72E+01		1.9E+00						L	18:56	20.0	3								
7039539	U-235	7.80E-01	pCi/L	3.5E-01		1.62E-01	96.4		UIISO_PLATE_	2.013E-01	02/23/2007	24.0	0.9		D						
DUP	15117-96-1	9.92E-01		3.3E-01						L	18:56	20.0	3								
7039539	U-238	2.47E+01	pCi/L	4.5E+00		1.62E-01	96.4		UIISO_PLATE_	2.013E-01	02/23/2007	3.6	0.3		D						
DUP	U-238	2.56E+01		1.8E+00						L	18:56	20.0	3								

Monday, March 19, 2007

## STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JNXLRL1JR

Sdg/Rept Nbr: W05107 34705

Collection Date: 02/01/2007 09:01

Client Id: B1LP09

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: DUP

Received Date: 02/01/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
S07-001		MW6-SBB-A19981																BW		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7039527	BE-7	1.39E+01	pCi/L	2.3E+01	U	4.40E+01			GAMMALL_GS	1.9528E+00	02/22/2007	42.6	0.3		D						
DUP	13966-02-4	9.03E+00		2.3E+01						L	08:47	20.0	3								
7039527	CO-60	1.63E+00	pCi/L	2.6E+00	U	5.51E+00			GAMMALL_GS	1.9528E+00	02/22/2007	8.6	0.1		D						
DUP	10198-40-0	1.78E+00		2.6E+00						L	08:47	20.0	3								
7039527	CS-134	-1.30E+00	pCi/L	3.0E+00	U	5.15E+00			GAMMALL_GS	1.9528E+00	02/22/2007	0.0	0.6		D						
DUP	13967-70-9	-1.30E-01		3.0E+00						L	08:47	20.0	3								
7039527	CS-137	-3.44E-01	pCi/L	2.6E+00	U	4.69E+00			GAMMALL_GS	1.9528E+00	02/22/2007	462.5	0.7		D						
DUP	10045-97-3	8.68E-01		2.6E+00						L	08:47	20.0	3								
7039527	EU-152	3.33E+00	pCi/L	5.1E+00	U	9.85E+00			GAMMALL_GS	1.9528E+00	02/22/2007	908.4	1.5		D						
DUP	14683-23-9	-2.13E+00		5.1E+00						L	08:47	20.0	3								
7039527	EU-154	-1.46E+00	pCi/L	6.6E+00	U	1.22E+01			GAMMALL_GS	1.9528E+00	02/22/2007	0.0	0.3		D						
DUP	15585-10-1	-2.64E+00		6.6E+00						L	08:47	20.0	3								
7039527	EU-155	-7.19E-01	pCi/L	4.0E+00	U	7.01E+00			GAMMALL_GS	1.9528E+00	02/22/2007	0.0	0.6		D						
DUP	14391-16-3	-2.45E+00		4.0E+00						L	08:47	20.0	3								
7039527	K-40	2.09E-01	pCi/L	5.4E+01	U	1.18E+02			GAMMALL_GS	1.9528E+00	02/22/2007	0.0	0.		D						
DUP	13966-00-2	-1.08E+00		5.4E+01						L	08:47	20.0	3								
7039527	RU-106	8.38E+00	pCi/L	1.9E+01	U	3.78E+01			GAMMALL_GS	1.9528E+00	02/22/2007	0.0	1.7		D						
DUP	13967-48-1	-1.48E+01		1.9E+01						L	08:47	20.0	3								
7039527	SB-125	-4.45E+00	pCi/L	5.9E+00	U	9.71E+00			GAMMALL_GS	1.9528E+00	02/22/2007	0.0	1.9		D						
DUP	14234-35-6	3.73E+00		5.9E+00						L	08:47	20.0	3								

Monday, March 19, 2007

## STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JNXLR1LR

Sdg/Rept Nbr: W05107

34705

Collection Date: 02/01/2007 09:01

Client Id: B1LP09

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: DUP

Received Date: 02/01/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RType	
S07-001		MW6-SBB-A19981																BY		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7039531	BETA	3.50E+01	pCi/L	5.4E+00		2.87E+00	100.0		9310_ALPHAB	2.004E-01	02/26/2007	9.3	0.9		D						
DUP	12587-47-2	3.84E+01		3.0E+00						L	20:25	20.0	3								

Monday, March 19, 2007

# STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\eddd\FeadIV\Rad\W05107.Edd, h:\Reportdb\eddd\FeadIV\Rad\34705.Edd

Lab Sample Id: JNXLR1MR

Sdg/Rept Nbr: W05107 34705

Collection Date: 02/01/2007 09:01

Client Id: B1LP09

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: DUP

Received Date: 02/01/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
S07-001		MW6-SBB-A19981																BZ		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7039542	SR-90	3.68E-02	pCi/L	2.9E-01	U	6.15E-01	84.9		SRISO_SEP_P	9.934E-01	02/28/2007	1771.4	0.3		D						
DUP	10098-97-2	-2.94E-02		2.9E-01						L	06:50	20.0	3								

Monday, March 19, 2007

## STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\eddd\FeadIV\Rad\W05107.Edd, h:\Reportdb\eddd\FeadIV\Rad\34705.Edd

Lab Sample Id: JNXMG1GR

Sdg/Rept Nbr: W05107 34705

Collection Date: 02/01/2007 10:15

Client Id: B1LP14

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: DUP

Received Date: 02/01/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RType	
S07-001		MW6-SBB-A19981																CA		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7039528	TC-99	2.05E+02	pCi/L	2.0E+01		9.86E+00	100.0		TC99_ETVDSK	1.254E-01	02/20/2007	4.1	0.6		D						
DUP	14133-76-7	2.13E+02		8.7E+00						L	10:37	20.0	3								



Monday, March 19, 2007

# STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JNXMG1HR

Sdg/Rept Nbr: W05107 34705

Collection Date: 02/01/2007 10:15

Client Id: B1LP14

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: DUP

Received Date: 02/01/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
S07-001		MW6-SBB-A19981																CB		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7039545	PU-238	0.00E+00	pCi/L	9.3E-02	U	2.19E-01	74.6		PUISO_PLATE	2.009E-01	02/20/2007	0.0	0.		D						
DUP	13981-16-3	0.00E+00		9.3E-02						L	18:40	20.0	3								
7039545	PU-239	2.74E-02	pCi/L	9.5E-02	U	2.59E-01	74.6		PUISO_PLATE	2.009E-01	02/20/2007	3.8	0.		D						
DUP	PU-239/240	2.85E-02		9.5E-02						L	18:40	20.0	3								

Monday, March 19, 2007

## STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JNXR01DR

Sdg/Rept Nbr: W05107 34705

Collection Date: 02/02/2007 10:02

Client Id: B1LPC1

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: DUP

Received Date: 02/02/2007

SAF Nbr		Contract Nbr		Test User	Case	Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id		FSuffix	RTyp	
S07-001		MW6-SBB-A19981											CC	H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7039533	H-3	4.81E+04	pCi/L	1.9E+03		3.02E+02	100.0		906.0_H3_LSC	5.00E-03	02/22/2007	.5	0.2		D
DUP	10028-17-8	4.83E+04		7.1E+02						L	20:54	20.0	3		

Monday, March 19, 2007

# STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JNXRL1CR

Sdg/Rept Nbr: W05107 34705

Collection Date: 02/02/2007 11:52

Client Id: B1LC48

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: DUP

Received Date: 02/02/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
S07-012		MW6-SBB-A19981																CD		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7039543	I-129L	5.12E-02	pCi/L	1.4E-01	U	2.75E-01	97.6		I129LL_SEP_L	3.7707E+00	02/26/2007	11.8	0.1		D						
DUP	15046-84-1	4.55E-02		1.4E-01						L	22:26	20.0	3								

Monday, March 19, 2007

# STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JNVW31CW

Sdg/Rept Nbr: W05107 34705

Collection Date: 02/01/2007 12:52

Client Id: B1LCH5

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: MS

Received Date: 02/01/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
S07-012		MW6-SBB-A19981																BT		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7039534	Uranium	3.93E+01	ug/L	2.3E+01		8.42E-02		3.62E+01	UTOT_KPA	2.49E-02	02/28/2007			60	D						
MS	7440-61-1			2.3E+01				108.6		ML	16:43			140							

Monday, March 19, 2007

## STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05107.Edd, h:\Reportdb\edd\FeadIV\Rad\34705.Edd

Lab Sample Id: JNXLR1KW

Sdg/Rept Nbr: W05107 34705

Collection Date: 02/01/2007 09:01

Client Id: B1LP09

Matrix: WATER WATER

Sample On Date:

Moisture/Solids%\*:

QC Type: MS

Received Date: 02/01/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr		SAS Nbr		Suffix		Decant		Distilled Volume		File Id		FSuffix		RTyp	
S07-001		MW6-SBB-A19981																BX		H	
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ						
7039528	TC-99	3.40E+03	pCi/L	2.4E+02		9.91E+00	100.0	3.68E+03	TC99_ETVDSK	1.245E-01	02/20/2007			60	D						
MS	14133-76-7			3.2E+01				92.3		L	10:37			140							

Lot No., Due Date: J7B050132; 03/19/2007  
Client, Site: 384868; PGW 615HANFORD HANFORD  
QC Batch No., Method Test: 7039545; RPUISO Pulso by ALP  
SDG, Matrix: W05107; WATER

**1.0 COC**

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes No N/A

☒**2.0 QC Batch**

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes No N/A

☒

2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A

☒

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A

☒

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A

☒**3.0 QC & Samples**

3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A

☒

3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A

☒

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A

☒

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A

☒

3.5 Are the sample yields and MDAs within contract limits? Yes No N/A

☒**4.0 Raw Data**

4.1 Were results calculated in the correct units? Yes No N/A

☒

4.2 Were analysis volumes entered correctly? Yes No N/A

☒

4.3 Were Yields entered correctly? Yes No N/A

☒

4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A

☒

4.5 Were raw counts reviewed for anomalies? Yes No N/A

☒**5.0 Other**

5.1 Are all nonconformances included and noted? Yes No N/A

☒

5.2 Are all required forms filled out? Yes No N/A

☒

5.3 Was the correct methodology used? Yes No N/A

☒

5.4 Was transcription checked? Yes No N/A

☒

5.5 Were all calculations checked at a minimum frequency? Yes No N/A

☒

5.6 Are worksheet entries complete and correct? Yes No N/A

☒

6.0 Comments on any No response:

First Level Review



Date

2/21/07



# STL

Data Review Checklist  
RADIOCHEMISTRY  
Second Level Review

QC Batch Number:

7039545  
W05107

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review:

*Sheryl R. Adams*

Date: 1-23-87

Lot No., Due Date: J7B020316; 03/19/2007  
Client, Site: 384868; PGW 615HANFORD HANFORD  
QC Batch No., Method Test: 7039539; RUIISO Also by ALP  
SDG, Matrix: W05107; WATER

**1.0 COC**

1.1 Is the ICCOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes No N/A

**2.0 QC Batch**

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch? Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes No N/A

**3.0 QC & Samples**

3.1 Is the blank results, yield, and MDA within contract limits? Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits? Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes No N/A

3.5 Are the sample yields and MDAs within contract limits? Yes No N/A

**4.0 Raw Data**

4.1 Were results calculated in the correct units? Yes No N/A

4.2 Were analysis volumes entered correctly? Yes No N/A

4.3 Were Yields entered correctly? Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements? Yes No N/A

4.5 Were raw counts reviewed for anomalies? Yes No N/A

**5.0 Other**

5.1 Are all nonconformances included and noted? Yes No N/A

5.2 Are all required forms filled out? Yes No N/A

5.3 Was the correct methodology used? Yes No N/A

5.4 Was transcription checked? Yes No N/A

5.5 Were all calculations checked at a minimum frequency? Yes No N/A

5.6 Are worksheet entries complete and correct? Yes No N/A

6.0 Comments on any No response:

First Level Review



Date

2/27/07





# STL

Data Review Checklist  
RADIOCHEMISTRY  
Second Level Review

QC Batch Number:

7039539

W05107

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review:

*Sheryl A. Adams*

Date:

2-28-07

Lot No., Due Date: J7B020335, J7B050132; 03/19/2007  
 Client, Site: 384868; PGW 615 HANFORD HANFORD  
 QC Batch No., Method Test: 7039532; RALPHA-A Alpha by GPC-Am  
 SDG, Matrix: WO5107, W05107; WATER

8.0 Correction Calculation Protocol Used. OK	Yes	No	N/A
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	Yes	No	N/A
8.02 Final Results Are in the Appropriate Activity Units OK	Yes	No	N/A
8.03 Batch Contains the Required QC Appropriate for the Method OK	Yes	No	N/A
8.04 The Correct Tracer and QC Vials Were Used in the Samples OK	Yes	No	N/A
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	Yes	No	N/A
8.06 At Least the Minimum Sample Volume Was Used OK	Yes	No	N/A
8.07 The Correct Count Geometry was Used. OK	Yes	No	N/A
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	Yes	No	N/A
8.09 Method Blank is within Control Limits. OK	Yes	No	N/A
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBIs) found in Batch!	Yes	No	N/A
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	Yes	No	N/A
8.13 QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0 => JNV3N1AD ALPHA 24.0 (RPD)	Yes	No	N/A
8.14 LCS within Control Limits. OK	Yes	No	N/A
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!	Yes	No	N/A
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!	Yes	No	N/A
8.17 Tracer within Control Limits. OK	Yes	No	N/A
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	Yes	No	N/A
8.19 Sample Specific MDC <= CRDL. OK	Yes	No	N/A
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JNV3N1A ALPHA 1.9E+00 L:1.3E+00 JNXLR1A ALPHA 4.2E+00 L:1.7E+00	Yes	No	N/A
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => ALPHA  OK; No Callin Level Found => ALPHA	Yes	No	N/A
8.24 Result + 3s >= 0, Not Too Negative. OK	Yes	No	N/A
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A

8.26 Instruments have Current Calibrations. Yes No N/A

8.27 Correct Count Library Used. Yes No N/A  
No Count Library found in Batch Data! ☒

8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No N/A

8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions) Yes No N/A

8.3 Comments: NCMH 10-09491

8.31 Results Blank Subtracted as Appropriate. Yes No N/A  
OK ☒

First Level Review

*Lee Antonson*

Date

2/27/07



# STL

Data Review Checklist  
RADIOCHEMISTRY  
Second Level Review

QC Batch Number:

7039532  
W05107

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			
2. Are all required forms filled out?	✓		✓
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review:

*Sheryl A. Adams*

Date: *2-28-07*

# Clouseau Nonconformance Memo

SEVERN  
TRENT  
SERVICES

NCM #: <b>10-09491</b>	Classification: <b>Deficiency</b>
NCM Initiated By: Lisa Antonson	Status: <b>GLREVIEW</b>
Date Opened: 02/27/2007	Production Area: Environmental - Prep
Date Closed:	Tests: Alpha by GPC-Am
	Lot #'s (Sample #'s): J7B020335 (1), J7B050132 (2), J7B080000 (532),
	QC Batches: 7039532
Nonconformance: Other (describe in detail)	
Subcategory: Other (explanation required)	

## Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	02/27/2007	On this Alpha batch, the LCS didn't have a recovery. Looking at the raw data, it was obvious that there was a blank/spike switch in the lab. The data was corrected in radcalc. The LCS is now 91%. Data accepted.

## Corrective Action

Name	Date	Corrective Action
Lisa Antonson	02/27/2007	Spoke with both analysts involved, they will use more caution.

## Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note
			<u>Response</u>		<u>Response Note</u>

## Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

## Approval History

Date Approved	Approved By	Position

Lot No., Due Date: J7B020335,J7B050132; 03/19/2007  
Client, Site: 384868; PGW 615HANFORD HANFORD  
QC Batch No., Method Test: 7039531; RBETA-SR Beta by GPC-Sr/Y  
SDG, Matrix: WO5107,W05107; WATER

8.0 Correction Calculation Protocol Used. OK	Yes	No	N/A
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	Yes	No	N/A
8.02 Final Results Are in the Appropriate Activity Units OK	Yes	No	N/A
8.03 Batch Contains the Required QC Appropriate for the Method OK	Yes	No	N/A
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	Yes	No	N/A
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	Yes	No	N/A
8.06 At Least the Minimum Sample Volume Was Used OK	Yes	No	N/A
8.07 The Correct Count Geometry was Used. OK	Yes	No	N/A
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	Yes	No	N/A
8.09 Method Blank is within Control Limits. OK	Yes	No	N/A
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBIs) found in Batch!	Yes	No	N/A
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	Yes	No	N/A
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	Yes	No	N/A
8.14 LCS within Control Limits. OK	Yes	No	N/A
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!	Yes	No	N/A
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!	Yes	No	N/A
8.17 Tracer within Control Limits. OK	Yes	No	N/A
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	Yes	No	N/A
8.19 Sample Specific MDC <= CRDL. OK	Yes	No	N/A
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JNV3N1A: BETA 7.4E+00 L:2.9E+00 JNXLR1AC BETA 3.8E+01 L:2.8E+00	Yes	No	N/A
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => BETA  OK; No Callin Level Found => BETA	Yes	No	N/A
8.24 Result + 3s >=0, Not Too Negative. OK	Yes	No	N/A
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A

8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A <input checked="checked" type="checkbox"/>
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes <input checked="checked" type="checkbox"/>	No	N/A

First Level Review *Joan Antonson* Date 2/27/07



# STL

Data Review Checklist  
RADIOCHEMISTRY  
Second Level Review

QC Batch Number:

7039531  
W05071

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review:

*Therese A. Adams*

Date:

2-28-07



Lot No., Due Date: J7A310377, J7B050132; 03/16/2007, 03/19/2007  
Client, Site: 384868; PGW 615 HANFORD HANFORD  
QC Batch No., Method Test: 7039542; RSR85907 Sr-85/90 by GPC-7  
SDG, Matrix: W05107; WATER

**1.0 COC**

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes ☒ No ☐ N/A ☐

**2.0 QC Batch**

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes ☒ No ☐ N/A ☐

2.2 Are the QC appropriate for the analysis included in the batch? Yes ☒ No ☐ N/A ☐

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes ☒ No ☐ N/A ☐

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes ☒ No ☐ N/A ☐

**3.0 QC & Samples**

3.1 Is the blank results, yield, and MDA within contract limits? Yes ☒ No ☐ N/A ☐

3.2 Is the LCS result, yield, and MDA within contract limits? Yes ☒ No ☐ N/A ☐

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes ☒ No ☐ N/A ☐

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes ☒ No ☐ N/A ☒

3.5 Are the sample yields and MDAs within contract limits? Yes ☒ No ☐ N/A ☐

**4.0 Raw Data**

4.1 Were results calculated in the correct units? Yes ☒ No ☐ N/A ☐

4.2 Were analysis volumes entered correctly? Yes ☒ No ☐ N/A ☐

4.3 Were Yields entered correctly? Yes ☒ No ☐ N/A ☐

4.4 Were spectra reviewed/meet contractual requirements? Yes ☒ No ☐ N/A ☐

4.5 Were raw counts reviewed for anomalies? Yes ☒ No ☐ N/A ☐

**5.0 Other**

5.1 Are all nonconformances included and noted? Yes ☐ No ☐ N/A ☒

5.2 Are all required forms filled out? Yes ☒ No ☐ N/A ☐

5.3 Was the correct methodology used? Yes ☒ No ☐ N/A ☐

5.4 Was transcription checked? Yes ☒ No ☐ N/A ☐

5.5 Were all calculations checked at a minimum frequency? Yes ☒ No ☐ N/A ☐

5.6 Are worksheet entries complete and correct? Yes ☒ No ☐ N/A ☐

6.0 Comments on any No response:

First Level Review

*Matt Lundy*

Date

*February 28, 2007*



# STL

Data Review Checklist  
RADIOCHEMISTRY  
Second Level Review

QC Batch Number:

7039542  
W05107

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review:

*Shirley R. Adams*

Date: *2-28-07*

Lot No., Due Date: J7B050132; 03/19/2007  
Client, Site: 384868; PGW 615HANFORD HANFORD  
QC Batch No., Method Test: 7039527; RGAMMA Gamma by GER  
SDG, Matrix: W05107; WATER

**1.0 COC**

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? ☒ Yes ☐ No ☐ N/A

**2.0 QC Batch**

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? ☒ Yes ☐ No ☐ N/A

2.2 Are the QC appropriate for the analysis included in the batch? ☒ Yes ☐ No ☐ N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? ☒ Yes ☐ No ☐ N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample? ☒ Yes ☐ No ☐ N/A

**3.0 QC & Samples**

3.1 Is the blank results, yield, and MDA within contract limits? ☒ Yes ☐ No ☐ N/A

3.2 Is the LCS result, yield, and MDA within contract limits? ☒ Yes ☐ No ☐ N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits? ☒ Yes ☐ No ☒ N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits? ☒ Yes ☐ No ☐ N/A

3.5 Are the sample yields and MDAs within contract limits? ☒ Yes ☐ No ☐ N/A

**4.0 Raw Data**

4.1 Were results calculated in the correct units? ☒ Yes ☐ No ☐ N/A

4.2 Were analysis volumes entered correctly? ☒ Yes ☐ No ☐ N/A

4.3 Were Yields entered correctly? ☒ Yes ☐ No ☒ N/A

4.4 Were spectra reviewed/meet contractual requirements? ☒ Yes ☐ No ☐ N/A

4.5 Were raw counts reviewed for anomalies? ☒ Yes ☐ No ☐ N/A

**5.0 Other**

5.1 Are all nonconformances included and noted? ☒ Yes ☐ No ☒ N/A

5.2 Are all required forms filled out? ☒ Yes ☐ No ☐ N/A

5.3 Was the correct methodology used? ☒ Yes ☐ No ☐ N/A

5.4 Was transcription checked? ☒ Yes ☐ No ☐ N/A

5.5 Were all calculations checked at a minimum frequency? ☒ Yes ☐ No ☐ N/A

5.6 Are worksheet entries complete and correct? ☒ Yes ☐ No ☐ N/A

6.0 Comments on any No response:

First Level Review



Date

2/22/07



# STL

Data Review Checklist  
RADIOCHEMISTRY  
Second Level Review

QC Batch Number:

7039527  
W05107

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review:

*Sheryl A. Adams*

Date:

2-23-07



STL

Data Review/Verification Checklist  
RADIOCHEMISTRY, First Level Review

3/6/2007 10:04:30 AM

Lot No., Due Date: J7A310377,J7B050132,J7B050154,J7B050158,J7B050163,J7B050162; 03/16/2007,03/19/2007  
Client, Site: 384868; PGW 615HANFORD HANFORD  
QC Batch No., Method Test: 7039543; RGAMLEPS Gamma by LEPS  
SDG, Matrix: W05107; WATER

8.0	Correction Calculation Protocol Used.	OK	Yes	No	N/A	
8.01	The Appropriate Methods Were Used To Analyze the Samples	Method Differs => JNPEH1AA LEP<>TB JNXLQ1AA LEP<>TB JNXLR1AE LEP<>TB JNXMG1AC LEP<>TB JNXN21AC LEP<>TB JNXPG1AC LEP<>TB JNXPQ1AC LEP<>TB JNXPW1AC LEP<>TB JNXRL1AA LEP<>TB JNXRL1AC LEP<>TB JNXR01AC LEP<>TB JN6FC1AA LEP<>TB JN6FC2AC LEP<>TB Q:V6	OK PA 3.6.08	Yes	No	N/A
8.02	Final Results Are in the Appropriate Activity Units	OK	Yes	No	N/A	
8.03	Batch Contains the Required QC Appropriate for the Method	OK	Yes	No	N/A	
8.04	The Correct Tracer and QC Vials Where Used in the Samples	OK	Yes	No	N/A	
8.05	Sample was Appropriately Traced Before or After Fractionating the Sample	OK	Yes	No	N/A	
8.06	At Least the Minimum Sample Volume Was Used	Analysis Volume => JNPEH1AA 3.942<4000.00 JNXLQ1AA 3.899<4000.00 JNXLR1AE 3.908<4000.00 JNXMG1AC 3.926<4000.00 JNXN21AC 3.905<4000.00 JNXPG1AC 3.877<4000.00 JNXPQ1AC 3.851<4000.00 JNXPW1AC 3.872<4000.00 JNXRL1AA 3.822<4000.00 JNXR01AC 3.935<4000.00 Q:VB	OK PA 3.6.08	Yes	No	N/A
8.07	The Correct Count Geometry was Used.	Count Geometry => JNPEH1AA I_FA<>IFA JNXLQ1AA I_FA<>IFA JNXLR1AE I_FA<>IFA JNXMG1AC I_FA<>IFA JNXN21AC I_FA<>IFA JNXPG1AC I_FA<>IFA JNXPQ1AC I_FA<>IFA JNXPW1AC I_FA<>IFA JNXRL1AA I_FA<>IFA JNXRL1AC I_FA<>IFA JNXR01AC I_FA<>IFA JN6FC1AA I_FA<>IFA JN6FC2AC I_FA<>IFA Q:VC	OK PA 3.6.08	Yes	No	N/A
8.08	The Sample was Counted for the Minimum Count Time or CRDL was Achieved.	OK	Yes	No	N/A	
8.09	Method Blank is within Control Limits.	OK	Yes	No	N/A	
8.1	Comments:					
8.11	Matrix Blank is within Control Limits.	No Matrix Blanks (MBIs) found in Batch!	Yes	No	N/A	
8.12	Method Blank(s) < QAS Limit Value (No B Flag Necessary).	OK	Yes	No	N/A	
8.13	QAS Specified Duplicate Equation Value within Control Limits.	OK (RPD)	Yes	No	N/A	

8.14 LCS within Control Limits. OK	Yes	No	N/A
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!	Yes	No	N/A
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!	Yes	No	N/A
8.17 Tracer within Control Limits. OK	Yes	No	N/A
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	Yes	No	N/A
8.19 Sample Specific MDC <= CRDL. OK	Yes	No	N/A
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JNXLR1AE I-129L 1.4E+00 L:2.6E-01 JNXMG1AC I-129L 7.7E-01 L:4.2E-01 JNXPQ1AC I-129L 1.7E+00 L:2.7E-01 JNXPW1AC I-129L 3.2E+00 L:3.0E-01 JNXR01AC I-129L 2.5E+00 L:2.7E-01	Yes	No	N/A
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => I-129L  OK; No Callin Level Found => I-129L	Yes	No	N/A
8.24 Result + 3s >=0, Not Too Negative. OK	Yes	No	N/A
8.25 Counting Spectrum are within FWHM Limits. FWHM > maxFWHM => JNXLR1AE I-129L 15>0 JNXPQ1AC I-129L 21.00>0 JNXPW1AC I-129L 18.00>0 JNXR01AC I-129L 25.00>0 JN6FC2AC I-129L 19.00>0 Q:V1	Yes	No	N/A
8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. Library Not Specified => JNPEH1AA I:[NUC_LIBR]LEPS.NLB Q: JNXLQ1AA I:[NUC_LIBR]LEPS.NLB Q: JNXLR1AE I:[NUC_LIBR]LEPS.NLB Q: JNXMG1AC I:[NUC_LIBR]LEPS.NLB Q: JNXN21AC I:[NUC_LIBR]LEPS.NLB Q: JNXPG1AC I:[NUC_LIBR]LEPS.NLB Q: JNXPQ1AC I:[NUC_LIBR]LEPS.NLB Q: JNXPW1AC I:[NUC_LIBR]LEPS.NLB Q: JNXRL1AA I:[NUC_LIBR]LEPS.NLB Q: JNXRL1AC I:[NUC_LIBR]LEPS.NLB Q: JNXR01AC I:[NUC_LIBR]LEPS.NLB Q: JN6FC1AA I:[NUC_LIBR]LEPS.NLB Q: JN6FC2AC I:[NUC_LIBR]LEPS.NLB Q:	Yes	No	N/A
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes	No	N/A

First Level Review

*Pam Anderson*

Date 3-16-07



# STL

Data Review Checklist  
RADIOCHEMISTRY  
Second Level Review

QC Batch Number:

7039543  
W05107

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓	544 5-6-07	
C. Other			
1. Are all Nonconformances included and noted?	✓		
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

See NCR

Second Level Review:

Shirley A. Adams

Date: 5-6-07

# Clouseau Nonconformance Memo



NCM #: <b>10-09515</b>	Classification: <b>Anomaly</b>
NCM Initiated By: Pam Anderson	Status: <b>GLREVIEW</b>
Date Opened: 03/06/2007	Production Area: Environmental - Sep
Date Closed:	Tests: Gamma by LEPS
	Lot #'s (Sample #'s): J7A310377 (1), J7B050132 (1,2,3), J7B050154 (3), J7B050158 (1,2,3), J7B050162 (1), J7B050163 (1), J7B080000 (543),
	QC Batches: 7039543
Nonconformance: Other (describe in detail)	
Subcategory: Other (explanation required)	

## Problem Description / Root Cause

<u>Name</u>	<u>Date</u>	<u>Description</u>
Pam Anderson	03/06/2007	This I 129 in water had a low LCS recovery. It was recounted. The recount gives a good LCS recovery. The difference is considered counting statistics.

## Corrective Action

<u>Name</u>	<u>Date</u>	<u>Corrective Action</u>
Pam Anderson	03/06/2007	The LCS was recounted.

## Client Notification Summary

<u>Client</u>	<u>Project Manager</u>	<u>Notified</u>	<u>Response</u>	<u>How Notified</u>	<u>Note</u>
			<u>Response</u>		<u>Response Note</u>

## Quality Assurance Verification

<u>Verified By</u>	<u>Due Date</u>	<u>Status</u>	<u>Notes</u>
			This section not yet completed by QA.

## Approval History

<u>Date Approved</u>	<u>Approved By</u>	<u>Position</u>
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Lot No., Due Date: J7B020339,J7B050132; 03/19/2007  
Client, Site: 384868; PGW 615HANFORD HANFORD  
QC Batch No., Method Test: 7039528; RTC99 Tc-99 by LSC  
SDG, Matrix: W05107; WATER

8.0 Correction Calculation Protocol Used. OK	Yes	No	N/A
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	Yes	No	N/A
8.02 Final Results Are in the Appropriate Activity Units OK	Yes	No	N/A
8.03 Batch Contains the Required QC Appropriate for the Method OK	Yes	No	N/A
8.04 The Correct Tracer and QC Vials Where Used in the Samples Incorrect Tracer/Vial => JNXL1AK TCSG<>TCSE Q:V9	Yes	No	N/A
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	Yes	No	N/A
8.06 At Least the Minimum Sample Volume Was Used OK	Yes	No	N/A
8.07 The Correct Count Geometry was Used. OK	Yes	No	N/A
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	Yes	No	N/A
8.09 Method Blank is within Control Limits. OK	Yes	No	N/A
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBIs) found in Batch!	Yes	No	N/A
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	Yes	No	N/A
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	Yes	No	N/A
8.14 LCS within Control Limits. OK	Yes	No	N/A
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!	Yes	No	N/A
8.16 MS within Control Limits. OK	Yes	No	N/A
8.17 Tracer within Control Limits. No Tracers found in Batch!	Yes	No	N/A
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!	Yes	No	N/A
8.19 Sample Specific MDC <= CRDL. OK	Yes	No	N/A
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc IDL Not Calculated	Yes	No	N/A
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => TC-99 OK; No Callin Level Found => TC-99	Yes	No	N/A
8.24 Result + 3s >=0, Not Too Negative. OK	Yes	No	N/A
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A

8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A <input checked="" type="checkbox"/>
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes <input checked="" type="checkbox"/>	No	N/A

First Level Review

*Lisa Antenson*

Date

*2/20/07*



# STL

Data Review Checklist  
RADIOCHEMISTRY  
Second Level Review

QC Batch Number:

7039528  
W05107

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

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\_\_\_\_\_

Second Level Review

*Sheryl A. Adams*

Date: 2-21-07

Lot No., Due Date: J7B020323,J7B020339,J7B050154,J7B050153,J7B050158,J7B050163; 03/19/2007  
Client, Site: 384868; PGW 615HANFORD HANFORD  
QC Batch No., Method Test: 7039533; RTRITIUM H-3 by LSC  
SDG, Matrix: W05107; WATER

**1.0 COC**

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes ☒ No ☐ N/A ☐

**2.0 QC Batch**

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes ☒ No ☐ N/A ☐

2.2 Are the QC appropriate for the analysis included in the batch? Yes ☒ No ☐ N/A ☐

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes ☒ No ☐ N/A ☐

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes ☒ No ☐ N/A ☐

**3.0 QC & Samples**

3.1 Is the blank results, yield, and MDA within contract limits? Yes ☒ No ☐ N/A ☐

3.2 Is the LCS result, yield, and MDA within contract limits? Yes ☒ No ☐ N/A ☐

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes ☐ No ☐ N/A ☒

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes ☒ No ☐ N/A ☐

3.5 Are the sample yields and MDAs within contract limits? Yes ☒ No ☐ N/A ☐

**4.0 Raw Data**

4.1 Were results calculated in the correct units? Yes ☒ No ☐ N/A ☐

4.2 Were analysis volumes entered correctly? Yes ☒ No ☐ N/A ☐

4.3 Were Yields entered correctly? Yes ☐ No ☐ N/A ☒

4.4 Were spectra reviewed/meet contractual requirements? Yes ☒ No ☐ N/A ☐

4.5 Were raw counts reviewed for anomalies? Yes ☒ No ☐ N/A ☐

**5.0 Other**

5.1 Are all nonconformances included and noted? Yes ☐ No ☐ N/A ☒

5.2 Are all required forms filled out? Yes ☒ No ☐ N/A ☐

5.3 Was the correct methodology used? Yes ☒ No ☐ N/A ☐

5.4 Was transcription checked? Yes ☒ No ☐ N/A ☐

5.5 Were all calculations checked at a minimum frequency? Yes ☒ No ☐ N/A ☐

5.6 Are worksheet entries complete and correct? Yes ☒ No ☐ N/A ☐

6.0 Comments on any No response:

First Level Review



Date

2/23/07



# STL

Data Review Checklist  
RADIOCHEMISTRY  
Second Level Review

QC Batch Number:

7039533  
W05107

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

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Second Level Review:

*Sheryl A. Adams*

Date: 2-23-07

Lot No., Due Date: J7B020316; 03/19/2007  
Client, Site: 384868; PGW 615HANFORD HANFORD  
QC Batch No., Method Test: 7039534; RUNAT UNat by KPA  
SDG, Matrix: W05107; WATER

**1.0 COC**

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions? Yes ☒ No ☐ N/A ☐

**2.0 QC Batch**

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet? Yes ☒ No ☐ N/A ☐

2.2 Are the QC appropriate for the analysis included in the batch? Yes ☒ No ☐ N/A ☐

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc? Yes ☒ No ☐ N/A ☐

2.4 Does the Worksheets include a Tracer Vial label for each sample? Yes ☒ No ☐ N/A ☐

**3.0 QC & Samples**

3.1 Is the blank results, yield, and MDA within contract limits? Yes ☒ No ☐ N/A ☐

3.2 Is the LCS result, yield, and MDA within contract limits? Yes ☒ No ☐ N/A ☐

3.3 Are the MS/MSD results, yields, and MDA within contract limits? Yes ☒ No ☐ N/A ☐

3.4 Are the duplicate result, yields, and MDAs within contract limits? Yes ☒ No ☐ N/A ☐

3.5 Are the sample yields and MDAs within contract limits? Yes ☒ No ☐ N/A ☐

**4.0 Raw Data**

4.1 Were results calculated in the correct units? Yes ☒ No ☐ N/A ☐

4.2 Were analysis volumes entered correctly? Yes ☒ No ☐ N/A ☐

4.3 Were Yields entered correctly? Yes ☒ No ☐ N/A ☐

4.4 Were spectra reviewed/meet contractual requirements? Yes ☒ No ☐ N/A ☐

4.5 Were raw counts reviewed for anomalies? Yes ☒ No ☐ N/A ☐

**5.0 Other**

5.1 Are all nonconformances included and noted? Yes ☐ No ☐ N/A ☒

5.2 Are all required forms filled out? Yes ☒ No ☐ N/A ☐

5.3 Was the correct methodology used? Yes ☒ No ☐ N/A ☐

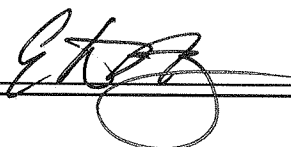
5.4 Was transcription checked? Yes ☒ No ☐ N/A ☐

5.5 Were all calculations checked at a minimum frequency? Yes ☒ No ☐ N/A ☐

5.6 Are worksheet entries complete and correct? Yes ☒ No ☐ N/A ☐

6.0 Comments on any No response:

First Level Review



Date 3/1/07



# STL

Data Review Checklist  
RADIOCHEMISTRY  
Second Level Review

QC Batch Number:

7039534  
W05107

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?	✓		
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

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\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Second Level Review:

*Sheryl A. Adam*

Date: 3-1-07

[illegible]





STL

# Sample Check-in List

Date/Time Received: 11/31/07 1500

Client: PNL

SDG #: W05107

NA ( )

SAF #: I07-021

NA ( )

Work Order Number: 07A310377

Chain of Custody # I07-021-4450

Shipping Container ID: \_\_\_\_\_

Air Bill # \_\_\_\_\_

1. Custody Seals on shipping container intact? NA ( ) Yes ( ☒ ) No ( )
2. Custody Seals dated and signed? NA ( ) Yes ( ☒ ) No ( )
3. Chain of Custody record present? Yes ( ☒ ) No ( )
4. Cooler temperature: \_\_\_\_\_ NA ( ☒ ) 5. Vermiculite/packing materials is NA ( ☒ ) Wet ( ) Dry ( )
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA ( ) Yes ( ) No ( )
8. Samples have:  
\_\_\_\_ tape  
\_\_\_\_ custody seals  
\_\_\_\_ hazard labels  
\_\_\_\_ appropriate samples labels
9. Samples are:  
\_\_\_\_ in good condition  
\_\_\_\_ broken  
\_\_\_\_ leaking  
\_\_\_\_ have air bubbles  
(Only for samples requiring head space)
10. Sample pH taken? NA ( ) pH < 2 ( ☒ ) pH > 2 ( ) pH > 9 ( )
11. Sample Location, Sample Collector Listed? \*  
\*For documentation only. No corrective action needed. Yes ( ☒ ) No ( )
12. Were any anomalies identified in sample receipt? Yes ( ) No ( ☒ )
13. Description of anomalies (include sample numbers): \_\_\_\_\_

Sample Custodian: For Party

Date: 11/31/07 1500

Client Sample ID	Analysis Requested	Condition	Comments/Action

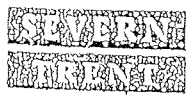
Client Informed on \_\_\_\_\_ by \_\_\_\_\_ Person contacted \_\_\_\_\_

( ) No action necessary; process as is.

Project Manager \_\_\_\_\_ Date \_\_\_\_\_

[illegible]

[illegible]



# STL

## Sample Check-in List

Date/Time Received: 2/1/07 1330

Client: PNL SDG #: W05107 NA ☐ SAF #: 507-012 NA ☐

Work Order Number: J7B020316

Chain of Custody # 507-012-268,284

Shipping Container ID: \_\_\_\_\_

Air Bill # \_\_\_\_\_

1. Custody Seals on shipping container intact? NA ☐ Yes ☒ No ☐
2. Custody Seals dated and signed? NA ☐ Yes ☒ No ☐
3. Chain of Custody record present? Yes ☒ No ☐
4. Cooler temperature: \_\_\_\_\_ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet ☐ Dry ☐
6. Number of samples in shipping container: \_\_\_\_\_
7. Sample holding times exceeded? NA ☒ Yes ☐ No ☐
8. Samples have:  
\_\_\_\_ tape  
\_\_\_\_ custody seals  
\_\_\_\_ hazard labels  
\_\_\_\_ appropriate samples labels
9. Samples are:  
\_\_\_\_ in good condition  
\_\_\_\_ broken  
\_\_\_\_ leaking  
\_\_\_\_ have air bubbles  
(Only for samples requiring head space)
10. Sample pH taken? NA ☐ pH < 2 ☒ pH > 2 ☐ pH > 9 ☐
11. Sample Location, Sample Collector Listed? \*  
\*For documentation only. No corrective action needed. Yes ☒ No ☐
12. Were any anomalies identified in sample receipt? Yes ☐ No ☒
13. Description of anomalies (include sample numbers): \_\_\_\_\_

Sample Custodian: Ken Pinsky Date: 2/1/07 1330

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on \_\_\_\_\_ by \_\_\_\_\_ Person contacted \_\_\_\_\_

☐ No action necessary; process as is.

Project Manager \_\_\_\_\_ Date \_\_\_\_\_

[illegible]



# STL

## Sample Check-in List

Date/Time Received 2/1/07

Client: PNL

SDG #: W05107 NA ☐ SAF #: S07-001 NA ☐

Work Order Number: J7B020323

Chain of Custody # S07-001,208

Shipping Container ID: \_\_\_\_\_

Air Bill # \_\_\_\_\_

1. Custody Seals on shipping container intact? NA ☐ Yes ☒ No ☐
2. Custody Seals dated and signed? NA ☐ Yes ☒ No ☐
3. Chain of Custody record present? Yes ☒ No ☐
4. Cooler temperature: \_\_\_\_\_ NA ☒ 5 Vermiculite/packing materials is NA ☒ Wet ☐ Dry ☐
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA ☒ Yes ☐ No ☐
8. Samples have:  
\_\_\_\_ tape  
\_\_\_\_ custody seals  
\_\_\_\_ hazard labels  
\_\_\_\_ appropriate samples labels
9. Samples are:  
\_\_\_\_ in good condition  
\_\_\_\_ broken  
\_\_\_\_ leaking  
\_\_\_\_ have air bubbles  
(Only for samples requiring head space)
10. Sample pH taken? NA ☐ pH<2 ☐ pH>2 ☒ pH>9 ☐
11. Sample Location, Sample Collector Listed? \*  
\*For documentation only. No corrective action needed. Yes ☒ No ☐
12. Were any anomalies identified in sample receipt? Yes ☐ No ☒
13. Description of anomalies (include sample numbers): \_\_\_\_\_

Sample Custodian: Eric Donly


Date: 2/1/07 1330

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on \_\_\_\_\_ by \_\_\_\_\_ Person contacted \_\_\_\_\_

☐ No action necessary; process as is.

Project Manager: \_\_\_\_\_ Date: \_\_\_\_\_

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	<b>Matrix *</b> S = Soil                      DS = Drum Solid SE = Sediment            DI = Drum Liquid SO = Solid                 T = Tissue SL = Sludge                WI = Wine W = Water                 L = Liquid O = Oil                      V = Vegetation A = Air                      X = Other
Fluor Hanford E M HALL			FEB 01 2007	J. Smith		J. Smith	FEB 01 2007	
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
<b>FINAL SAMPLE DISPOSITION</b>	Disposal Method (e.g., Return to customer, per lab procedure, used in process)						Disposed By	Date/Time



# STL

## Sample Check-in List

Date/Time Received: 02-01-07 1445

Client: P6W SDG #: W05107 NA ☐ SAF #: W07-001 NA ☐

Work Order Number: J7B020335 Chain of Custody # W07-001-193

Shipping Container ID: \_\_\_\_\_ Air Bill # \_\_\_\_\_

1. Custody Seals on shipping container intact? NA ☐ Yes ☒ No ☐
2. Custody Seals dated and signed? NA ☐ Yes ☒ No ☐
3. Chain of Custody record present? Yes ☒ No ☐
4. Cooler temperature: \_\_\_\_\_ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet ☐ Dry ☐
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA ☒ Yes ☐ No ☐
8. Samples have:  
\_\_\_\_ tape  
\_\_\_\_ custody seals  
\_\_\_\_ hazard labels  
\_\_\_\_ appropriate samples labels
9. Samples are:  
\_\_\_\_ in good condition  
\_\_\_\_ broken  
\_\_\_\_ leaking.  
\_\_\_\_ have air bubbles  
(Only for samples requiring head space)
10. Sample pH taken? NA ☐ pH < 2 ☒ pH > 2 ☐ pH > 9 ☐
11. Sample Location, Sample Collector Listed? \*  
\*For documentation only. No corrective action needed. Yes ☒ No ☐
12. Were any anomalies identified in sample receipt? Yes ☐ No ☒
13. Description of anomalies (include sample numbers): \_\_\_\_\_

Sample Custodian: S. Smith Date: 02-01-07 1445

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on \_\_\_\_\_ by \_\_\_\_\_ Person contacted \_\_\_\_\_

[ ] No action necessary; process as is.

Project Manager \_\_\_\_\_ Date \_\_\_\_\_



[illegible]

[illegible]



# STL

## Sample Check-in List

Date/Time Received: 02-01-07 1445

Client: P6W

SDG #: W05107 NA ☐ SAF #: 507-001 NA ☐

Work Order Number: J7B020339

Chain of Custody # 507-001-362,378

Shipping Container ID: \_\_\_\_\_

Air Bill # \_\_\_\_\_

1. Custody Seals on shipping container intact? NA ☐ Yes ☒ No ☐
2. Custody Seals dated and signed? NA ☐ Yes ☒ No ☐
3. Chain of Custody record present? Yes ☒ No ☐
4. Cooler temperature: \_\_\_\_\_ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet ☐ Dry ☐
6. Number of samples in shipping container: 2
7. Sample holding times exceeded? NA ☒ Yes ☐ No ☐
8. Samples have:  
\_\_\_\_ tape  
\_\_\_\_ custody seals  
\_\_\_\_ hazard labels  
\_\_\_\_ appropriate samples labels
9. Samples are:  
\_\_\_\_ in good condition  
\_\_\_\_ broken  
\_\_\_\_ leaking  
\_\_\_\_ have air bubbles  
(Only for samples requiring head space)
10. Sample pH taken? NA ☐ pH < 2 ☒ pH > 2 ☒ pH > 9 ☐
11. Sample Location, Sample Collector Listed? \*  
\*For documentation only. No corrective action needed. Yes ☒ No ☐
12. Were any anomalies identified in sample receipt? Yes ☐ No ☒
13. Description of anomalies (include sample numbers): \_\_\_\_\_

Sample Custodian: A. Smith Date: 02-01-07 1445

Client Sample ID	Analysis Requested	Condition	Comments/Action

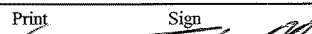
Client Informed on \_\_\_\_\_ by \_\_\_\_\_ Person contacted \_\_\_\_\_

☐ No action necessary; process as is.

Project Manager \_\_\_\_\_ Date \_\_\_\_\_

PNNL <i>J7B050132</i> <i>W05107</i> <i>Due 03-19-07</i>		<b>CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</b>		C.O.C. # <b>S07-001-280</b>
Collector <del>Fluor Hanford</del> <b>F.M. HALL</b>		Contact/Requester Dot Stewart	Telephone No. MSIN FAX 509-376-5056	Page <u>1</u> of <u>1</u>
SAF No. S07-001	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title SURV. JANUARY 2007	<i>HMF-N-506 3</i>	Ice Chest No. <i>1255</i>	Temp.	
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol SURV	Priority: 45 Days	Offsite Property No.		
<b>POSSIBLE SAMPLE HAZARDS/REMARKS</b> ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		<b>SPECIAL INSTRUCTIONS</b> <b>Hold Time</b> Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		

[illegible]

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *	
F. M. HALL			FEB 01 2007	H. Smith		S. Smith	FEB 01 2007	S = Soil	DS = Drum Solid
Relinquished By			Date/Time	Received By			Date/Time	SE = Sediment	DL = Drum Liquid
								SO = Solid	T = Tissue
Relinquished By			Date/Time	Received By			Date/Time	SL = Sludge	WI = Wine
								W = Water	L = Liquid
								O = Oil	V = Vegetation
								A = Air	X = Other
Relinquished By			Date/Time	Received By			Date/Time		
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)						Disposed By	Date/Time	



[illegible]



# STL

## Sample Check-in List

Date/Time Received: 02-01-07 1445

Client: Pbw

SDG #: 1005107

NA ☐

SAF #:

507-001-

NA ☐

Work Order Number: 17B050132

Chain of Custody # 507-001-280,306,314

Shipping Container ID: \_\_\_\_\_

Air Bill # \_\_\_\_\_

1. Custody Seals on shipping container intact? NA ☐ Yes ☒ No ☐
2. Custody Seals dated and signed? NA ☐ Yes ☒ No ☐
3. Chain of Custody record present? Yes ☒ No ☐
4. Cooler temperature: \_\_\_\_\_ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet ☐ Dry ☐
6. Number of samples in shipping container: 3
7. Sample holding times exceeded? NA ☒ Yes ☐ No ☐
8. Samples have:  
\_\_\_\_ tape  
\_\_\_\_ custody seals  
\_\_\_\_ hazard labels  
\_\_\_\_ appropriate samples labels
9. Samples are:  
\_\_\_\_ in good condition  
\_\_\_\_ broken  
\_\_\_\_ leaking  
\_\_\_\_ have air bubbles  
(Only for samples requiring head space)
10. Sample pH taken? NA ☐ pH < 2 ☒ pH > 2 ☒ pH > 9 ☐
11. Sample Location, Sample Collector Listed? \*  
\*For documentation only. No corrective action needed. Yes ☒ No ☐
12. Were any anomalies identified in sample receipt? Yes ☐ No ☒
13. Description of anomalies (include sample numbers): \_\_\_\_\_

Sample Custodian: S. Smith

Date: 02-01-07 1445

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on \_\_\_\_\_ by \_\_\_\_\_ Person contacted \_\_\_\_\_

☐ No action necessary; process as is.

Project Manager \_\_\_\_\_

Date \_\_\_\_\_

[illegible]





STL

## Sample Check-in List

Date/Time Received: 02-01-07 1445Client: PBWSDG #: W05107NA ☐

SAF #:

807-010NA ☐Work Order Number: J78050153Chain of Custody # 807-010-271

Shipping Container ID: \_\_\_\_\_

Air Bill # \_\_\_\_\_

1. Custody Seals on shipping container intact? NA ☐ Yes ☒ No ☐
2. Custody Seals dated and signed? NA ☐ Yes ☒ No ☐
3. Chain of Custody record present? Yes ☒ No ☐
4. Cooler temperature: \_\_\_\_\_ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet ☐ Dry ☐
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA ☒ Yes ☐ No ☐
8. Samples have:  
\_\_\_\_ tape  
\_\_\_\_ custody seals  
\_\_\_\_ hazard labels  
\_\_\_\_ appropriate samples labels
9. Samples are:  
\_\_\_\_ in good condition  
\_\_\_\_ broken  
\_\_\_\_ leaking  
\_\_\_\_ have air bubbles  
(Only for samples requiring head space)
10. Sample pH taken? NA ☐ pH < 2 ☐ pH > 2 ☒ pH > 9 ☐
11. Sample Location, Sample Collector Listed? \*  
\*For documentation only. No corrective action needed. Yes ☒ No ☐
12. Were any anomalies identified in sample receipt? Yes ☐ No ☒
13. Description of anomalies (include sample numbers): \_\_\_\_\_

Sample Custodian: S. SmithDate: 02-01-07 1445

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on \_\_\_\_\_ by \_\_\_\_\_ Person contacted \_\_\_\_\_

☐ No action necessary; process as is.

Project Manager \_\_\_\_\_

Date \_\_\_\_\_

PNNL <b>578050154</b> <b>W05107</b> <i>Due 03.19.07</i>		<b>CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</b>		C.O.C. # <b>S07-001-178</b>
		Page <u>1</u> of <u>1</u>		
<b>Collector</b> Fluor Hanford	<b>Contact/Requester</b> Dot Stewart	<b>Telephone No.</b> 509-376-5056	<b>MSIN</b> 	<b>FAX</b> 
<b>SAF No.</b> K. B. HULSE S07-001	<b>Sampling Origin</b> Hanford Site	<b>Purchase Order/Charge Code</b> 		
<b>Project Title</b> SURV. JANUARY 2007	<b>Method of Shipment</b> <i>HNF-N-506-2</i>	<b>Ice Chest No.</b> <i>115</i>	<b>Temp.</b> 	
<b>Shipped To (Lab)</b> Severn Trent Incorporated, Richland	<b>Method of Shipment</b> Govt. Vehicle	<b>Bill of Lading/Air Bill No.</b> 		
<b>Protocol</b> SURV	<b>Priority:</b> 45 Days	<b>Offsite Property No.</b> 		
<b>POSSIBLE SAMPLE HAZARDS/REMARKS</b> ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		<b>SPECIAL INSTRUCTIONS</b> All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		
		<b>Hold Time</b> 	<b>Total Activity Exemption:</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

[illegible]

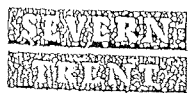
Relinquished By		Print	Sign	Date/Time	Received By		Print	Sign	Date/Time	Matrix *	
K. B. HULSE			<i>[Signature]</i>	FEB 02 2007 1240	ERIC DAWBY			<i>[Signature]</i>	FEB 02 2007 1240	S = Soil DS = Drum Solid SE = Sediment DI = Drum Liquid SO = Solid T = Tissue SL = Sludge WI = Wine W = Water L = Liquid O = Oil V = Vegetation A = Air X = Other	
Relinquished By				Date/Time	Received By				Date/Time		
Relinquished By				Date/Time	Received By				Date/Time		
Relinquished By				Date/Time	Received By				Date/Time		

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)		Disposed By		Date/Time





[illegible]



STL

### Sample Check-in List

Date/Time Received: 2/1/07 1030

Client: PNL

SDG # W05107

NA ( ) SAF # 507001 NA ( )

Work Order Number: 578050154

Chain of Custody # 507-001,178,179,394,420

Shipping Container ID: \_\_\_\_\_

Air Bill # \_\_\_\_\_

1. Custody Seals on shipping container intact? NA ( ) Yes ( ) No ( ) ☒
2. Custody Seals dated and signed? NA ( ) Yes ( ) No ( ) ☒
3. Chain of Custody record present? Yes ( ) No ( ) ☒
4. Cooler temperature: \_\_\_\_\_ NA ( ) ☒ 5. Vermiculite/packing materials is NA ( ) ☒ Wet ( ) Dry ( )
6. Number of samples in shipping container: 4
7. Sample holding times exceeded? NA ( ) Yes ( ) No ( ) ☒
8. Samples have:  
\_\_\_\_ tape  
\_\_\_\_ custody seals  
\_\_\_\_ hazard labels  
\_\_\_\_ appropriate samples labels ☒
9. Samples are:  
\_\_\_\_ in good condition ☒  
\_\_\_\_ broken  
\_\_\_\_ leaking  
\_\_\_\_ have air bubbles  
(Only for samples requiring head space)
10. Sample pH taken? NA ( ) pH < 2 ( ) pH > 2 ( ) ☒ pH > 9 ( )
11. Sample Location, Sample Collector Listed? \*  
\*For documentation only. No corrective action needed. Yes ( ) No ( ) ☒
12. Were any anomalies identified in sample receipt? Yes ( ) No ( ) ☒
13. Description of anomalies (include sample numbers): \_\_\_\_\_

Sample Custodian: Ene Darby

Date: 2/2/07 1240

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on \_\_\_\_\_ by \_\_\_\_\_ Person contacted \_\_\_\_\_

( ) No action necessary; process as is.

Project Manager \_\_\_\_\_ Date \_\_\_\_\_

PNNL <b>J78050158</b> <b>W05107</b> <b>Due 03-19-07</b>		<b>CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</b>		C.O.C. # <b>S07-001-226</b>
				Page <u>1</u> of <u>1</u>
Collector HANFORD <b>M.R. WEIL</b>	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN <b>FAX</b>	
SAF No. S07-001	Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title SURV. JANUARY 2007	<b>HNF-N-506-4</b>	Ice Chest No. <b>SXL-562</b>	Temp.	
Shipped To (Lab) Severn Trent Incorporated, Richland	Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Protocol SURV	Priority: 45 Days	Offsite Property No.		
<b>POSSIBLE SAMPLE HAZARDS/REMARKS</b> ** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		<b>SPECIAL INSTRUCTIONS</b> <b>Hold Time</b> All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.		
		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

[illegible]

Relinquished By		Date/Time	Received By	Date/Time	<b>Matrix *</b> S = Soil                      DS = Drum Solid SE = Sediment              DL = Drum Liquid SO = Solid                      T = Tissue SL = Sludge                      WI = Wine W = Water                      L = Liquid O = Oil                              V = Vegetation A = Air                              X = Other
Relinquished By		Date/Time	Received By	Date/Time	
Relinquished By		Date/Time	Received By	Date/Time	
Relinquished By		Date/Time	Received By	Date/Time	
<b>FINAL SAMPLE DISPOSITION</b>	Disposal Method (e.g., Return to customer, per lab procedure, used in process)				Disposed By Date/Time









# STL

## Sample Check-in List

Date/Time Received: 2/2/07 1250

Client: PAL

SDG #: W05107

NA ☐

SAF #: S07-001

NA ☐

Work Order Number: J78050158

Chain of Custody # S07-001-226,214,190

Shipping Container ID: \_\_\_\_\_

Air Bill # \_\_\_\_\_

1. Custody Seals on shipping container intact? NA ☐ Yes ☒ No ☐
2. Custody Seals dated and signed? NA ☐ Yes ☒ No ☐
3. Chain of Custody record present? Yes ☒ No ☐
4. Cooler temperature: \_\_\_\_\_ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet ☐ Dry ☐
6. Number of samples in shipping container: 3
7. Sample holding times exceeded? NA ☒ Yes ☐ No ☐
8. Samples have:  
\_\_\_\_ tape  
\_\_\_\_ custody seals  
\_\_\_\_ hazard labels  
\_\_\_\_ appropriate samples labels
9. Samples are:  
\_\_\_\_ in good condition  
\_\_\_\_ broken  
\_\_\_\_ leaking  
\_\_\_\_ have air bubbles  
(Only for samples requiring head space)
10. Sample pH taken? NA ☐ pH < 2 ☐ pH > 2 ☒ pH > 9 ☐
11. Sample Location, Sample Collector Listed? \*  
\*For documentation only. No corrective action needed. Yes ☐ No ☐
12. Were any anomalies identified in sample receipt? Yes ☐ No ☐
13. Description of anomalies (include sample numbers): \_\_\_\_\_

Sample Custodian: For Daily

Date: 2/2/07 1250

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on \_\_\_\_\_ by \_\_\_\_\_ Person contacted \_\_\_\_\_

☐ No action necessary; process as is.

Project Manager \_\_\_\_\_

Date \_\_\_\_\_





# STL

## Sample Check-in List

Date/Time Received: 2/2/07 1500

Client: PNL

SDG #: W05107

NA ☐

SAF #: S07-012

NA ☐

Work Order Number: W05107

Chain of Custody #: S07-012-574

Shipping Container ID: \_\_\_\_\_

Air Bill #: \_\_\_\_\_

1. Custody Seals on shipping container intact? NA ☐ Yes ☒ No ☐
2. Custody Seals dated and signed? NA ☐ Yes ☒ No ☐
3. Chain of Custody record present? Yes ☒ No ☐
4. Cooler temperature: \_\_\_\_\_ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet ☐ Dry ☐
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA ☐ Yes ☐ No ☐
8. Samples have:  
\_\_\_\_ tape  
\_\_\_\_ custody seals  
\_\_\_\_ hazard labels  
\_\_\_\_ appropriate samples labels
9. Samples are:  
\_\_\_\_ in good condition  
\_\_\_\_ broken  
\_\_\_\_ leaking  
\_\_\_\_ have air bubbles  
(Only for samples requiring head space)
10. Sample pH taken? NA ☐ pH < 2 ☐ pH > 2 ☒ pH > 9 ☐
11. Sample Location, Sample Collector Listed? \*  
\*For documentation only. No corrective action needed. Yes ☒ No ☐
12. Were any anomalies identified in sample receipt? Yes ☐ No ☒
13. Description of anomalies (include sample numbers): \_\_\_\_\_

Sample Custodian: E. Daily

Date: 2/2/07 1510

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on \_\_\_\_\_ by \_\_\_\_\_ Person contacted \_\_\_\_\_

( ) No action necessary; process as is.

Project Manager: \_\_\_\_\_

Date: \_\_\_\_\_





# STL

## Sample Check-in List

Date/Time Received: 2/2/07 1500

Client: PNL

SDG #: W05707

NA ☐

SAF #:

S07-001

NA ☐

Work Order Number: J7B050163

Chain of Custody # S07-001-256

Shipping Container ID: \_\_\_\_\_

Air Bill # \_\_\_\_\_

1. Custody Seals on shipping container intact? NA ☐ Yes ☒ No ☐
2. Custody Seals dated and signed? NA ☐ Yes ☒ No ☐
3. Chain of Custody record present? Yes ☒ No ☐
4. Cooler temperature: \_\_\_\_\_ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet ☐ Dry ☐
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA ☐ Yes ☐ No ☐
8. Samples have:  
\_\_\_\_ tape  
\_\_\_\_ custody seals  
\_\_\_\_ hazard labels  
\_\_\_\_ appropriate samples labels
9. Samples are:  
\_\_\_\_ in good condition  
\_\_\_\_ broken  
\_\_\_\_ leaking  
\_\_\_\_ have air bubbles  
(Only for samples requiring head space)
10. Sample pH taken? NA ☐ pH < 2 ☐ pH > 2 ☒ pH > 9 ☐
11. Sample Location, Sample Collector Listed? \*  
\*For documentation only. No corrective action needed. Yes ☒ No ☐
12. Were any anomalies identified in sample receipt? Yes ☐ No ☒
13. Description of anomalies (include sample numbers): \_\_\_\_\_

Sample Custodian: Erin Dandy

Date: 2/2/07 1500

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on \_\_\_\_\_ by \_\_\_\_\_ Person contacted \_\_\_\_\_

☐ No action necessary; process as is.

Project Manager \_\_\_\_\_

Date \_\_\_\_\_

2/16/2007 10:14:27 AM

## Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,  
Pacific Northwest National Lab6D Pu PrpRC5016, SepRC5010(5039)  
SO Plutonium-238,239/40 by Alpha Spec  
5I CLIENT: HANFORD

Pipet #: \_\_\_\_\_

AnalyDueDate: 03/19/2007 *W05107*

Sep1 DT/Tm Tech:






Batch: 7039545 WATER pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On   Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JNXLRL-1-AF J7B050132-2-SAMP  02/01/2007 09:01	199.70g,in		PUTC10495 01/23/07,pd 08/04/06,r	200				
AmtRec: 20ML,500MLP,5XLP,3X4LP #Containers: 10 Scr: Alpha: -3.53E-04 uCi/Sa Beta: -1.35E-03 uCi/Sa								
2 JNXMG-1-AD J7B050132-3-SAMP  02/01/2007 10:15	203.60g,in		PUTC10496 01/23/07,pd 08/04/06,r					
AmtRec: 20ML,500MLP,5XLP,3X4LP #Containers: 9 Scr: Alpha: 1.40E-03 uCi/Sa Beta: -3.04E-04 uCi/Sa								
3 JNXMG-1-AH-X J7B050132-3-DUP  02/01/2007 10:15	200.90g,in		PUTC10497 01/23/07,pd 08/04/06,r					
AmtRec: 20ML,500MLP,5XLP,3X4LP #Containers: 9 Scr: Alpha: 1.40E-03 uCi/Sa Beta: -3.04E-04 uCi/Sa								
4 JN6FE-1-AA-B J7B080000-545-BLK  02/01/2007 10:15	200.20g,in		PUTC10498 01/23/07,pd 08/04/06,r					
AmtRec: #Containers: 1 Scr: Alpha: Beta:								
5 JN6FE-1-AC-C J7B080000-545-LCS  02/01/2007 10:15	202.90g,in		PUSG0903 02/14/07,pd 08/04/06,r					
AmtRec: #Containers: 1 Scr: Alpha: Beta:								

Comments: *PH L2.0 JB 2-16-07*

## All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

## JNXLRL1AF-SAMP Constituent List:

PU-238 RDL:1 pCi/L LCL: UCL: RPD: PU-239 RDL:1 pCi/L LCL:70 UCL:130 RPD:20

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 5

Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Prep\_SamplePrep v4.8.26

2/20/2007 12:47:40 PM

## Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,  
Pacific Northwest National Lab

7Y Uiso PrpRC5016/5086, SepRC5067(5039)

Pipet #: \_\_\_\_\_

AnalyDueDate: 03/19/2007 *W05107*

SR Uranium-234,235,238 by Alpha Spec

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 7039539 WATER





pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On   Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JNVW7-1-AA J7B020316-2-SAMP  02/01/2007 12:04			201.50g,in	201.50g	UITC17049 02/12/07,pd 01/20/04,r	<i>200</i>				
-----										
			AmtRec: 20ML,500MLP,LP		#Containers: 3		Scr:	Alpha: 4.98E-04 uCi/Sa		Beta: -3.30E-04 uCi/Sa
2 JNVW7-1-AE-X J7B020316-2-DUP  02/01/2007 12:04			201.30g,in	201.30g	UITC17050 02/12/07,pd 01/20/04,r					
-----										
			AmtRec: 20ML,500MLP,LP		#Containers: 3		Scr:	Alpha: 4.98E-04 uCi/Sa		Beta: -3.30E-04 uCi/Sa
3 JN6E8-1-AA-B J7B080000-539-BLK  02/01/2007 12:04			201.20g,in	201.20g	UITC17051 02/12/07,pd 01/20/04,r					
-----										
			AmtRec:		#Containers: 1		Scr:	Alpha:		Beta:
4 JN6E8-1-AC-C J7B080000-539-LCS  02/01/2007 12:04			200.10g,in	200.10g	UISG1402 02/12/07,pd 01/20/04,r					
-----										
			AmtRec:		#Containers: 1		Scr:	Alpha:		Beta:

Comments:

*PH < 2.0 8/2-20-01*

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JNVW71AA-SAMP Constituent List:

U-232	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	U-234	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
U-235	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:	U-238	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:

JN6E81AA-BLK:

U-232	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	U-234	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
U-235	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:	U-238	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:

STL Richland

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2

Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 4

Richland Wa.

pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Prep\_SamplePrep v4.8.26



Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,  
Pacific Northwest National Lab

AZ Gross Alpha PrpRC5014  
S7 Gross Alpha by GPC using Am-241 curve  
5I CLIENT: HANFORD

Pipet #: 235

AnalyDueDate: 03/19/2007 0005107

**Sep1 DT/Tm Tech:**






Batch: 7039532      WATER      pCi/L

PM, Quote: SA, 57671

**Sep2 DT/Tm Tech:**

SEQ Batch, Test: None

Prep Tech: ,BockJ /APA

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On   Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JNV3N-1-AA J7B020335-1-SAMP 	200.40g,in									
02/01/2007 12:16	AmtRec: 20ML,LP	#Containers: 2						Scr: Alpha: -5.13E-05 uCi/Sa	Beta: 1.62E-04 uCi/Sa	
2 JNV3N-1-AD-X J7B020335-1-DUP 	201.30g,in									
02/01/2007 12:16	AmtRec: 20ML,LP	#Containers: 2						Scr: Alpha: -5.13E-05 uCi/Sa	Beta: 1.62E-04 uCi/Sa	
3 JNXLR-1-AA J7B050132-2-SAMP 	203.40g,in									
02/01/2007 09:01	AmtRec: 20ML,500MLP,5XLP,3X4LP	#Containers: 10						Scr: Alpha: -3.53E-04 uCi/Sa	Beta: -1.35E-03 uCi/Sa	
4 JN6EA-1-AA-B J7B080000-532-BLK 	199.30g,in									
02/01/2007 12:16	AmtRec:	#Containers: 1						Scr: Alpha:	Beta:	
5 JN6EA-1-AC-C J7B080000-532-LCS 	199.70g,in	ASD4124 01/18/07,pd 02/09/06,r								
02/01/2007 12:16	AmtRec:	#Containers: 1						Scr: Alpha:	Beta:	

Comments: PH 42-0 932-19-07

All Clients for Batch:

384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JNV3N1AA-SAMP Constituent List:

ALPHA                      RDL:3                      pCi/L                      LCL:                      UCL:                      RPD:

STL Richland      Key: In - Initial Amt,    fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2      Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 5

Richland Wa.      pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Prep\_SamplePrep v4.8.26

2/19/2007 8:45:37 AM

## Sample Preparation/Analysis

Balance Id:1120482733

AZ Gross Alpha PrpRC5014

Pipet #: \_\_\_\_\_

S7 Gross Alpha by GPC using Am-241 curve

5I CLIENT: HANFORD

AnalyDueDate: 03/19/2007

Sep1 DT/Tm Tech:

Batch: 7039532

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On   Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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JN6EA1AA-BLK:

ALPHA RDL:3 pCi/L LCL: UCL: RPD:

JN6EA1AC-LCS:

Am-241 RDL: pCi/L LCL:70 UCL:130 RPD:20

JNV3N1AA-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JN6EA1AA-BLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JN6EA1AC-LCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By \_\_\_\_\_

Date: \_\_\_\_\_

Balance Id:1120482733

BC Gross Beta PrpRC5014  
S8 Gross Beta by GPC using Sr/Y-90 curve  
5I CLIENT: HANFORD

Pipet #: 235

AnalyDueDate: 03/19/2007 0005107

51 CLIENT: HANFORD

**Sep1 DT/Tm Tech:**






Batch: 7039531      WATER      pCi/L

PM, Quote: SA , 57671

**Sep2 DT/Tm Tech:**

SEQ Batch, Test: None

Prep Tech: ,BockJ / APA

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On   Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JNV3N-1-AC J7B020335-1-SAMP 	201.40g,in				1.5 46.7 100		26A	2115	2/26/0701P	
02/01/2007 12:16	AmtRec: 20ML,LP	#Containers: 2					Scr:	Alpha: -5.13E-05 uCi/Sa	Beta: 1.62E-04 uCi/Sa	
2 JNXLR-1-AC J7B050132-2-SAMP 	200.10g,in				62.5		26B			
02/01/2007 09:01	AmtRec: 20ML,500MLP,5XLP,3X4LP	#Containers: 10					Scr:	Alpha: -3.53E-04 uCi/Sa	Beta: -1.35E-03 uCi/Sa	
3 JNXLR-1-AL-X J7B050132-2-DUP 	200.40g,in				65.7		26C			
02/01/2007 09:01	AmtRec: 20ML,500MLP,5XLP,3X4LP	#Containers: 10					Scr:	Alpha: -3.53E-04 uCi/Sa	Beta: -1.35E-03 uCi/Sa	
4 JN6D6-1-AA-B J7B080000-531-BLK 	201.60g,in				0.3		26D			
02/01/2007 09:01	AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	
5 JN6D6-1-AC-C J7B080000-531-LCS 	200.60g,in	BESB3004 01/23/07,pd 08/08/06,r			0.5		27D			
02/01/2007 09:01	AmtRec:	#Containers: 1					Scr:	Alpha:	Beta:	

Comments: PH L2-0 JB 2-19-07

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JNV3N1AC-SAMP Constituent List:

BETA                      RDL:4                      pCi/L                      LCL:                      UCL:                      RPD:

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 5

Richland Wa.      pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Prep SamplePrep v4.8.26

2/19/2007 8:40:45 AM

## Sample Preparation/Analysis

Balance Id:1120482733

BC Gross Beta PrpRC5014  
S8 Gross Beta by GPC using Sr/Y-90 curve  
5I CLIENT: HANFORD

Pipet #: \_\_\_\_\_

AnalyDueDate: 03/19/2007

Sep1 DT/Tm Tech: \_\_\_\_\_

Batch: 7039531

pCi/L

Sep2 DT/Tm Tech: \_\_\_\_\_

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On   Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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JN6D61AA-BLK:

BETA RDL:4 pCi/L LCL: UCL: RPD:

JN6D61AC-LCS:

Sr-90 RDL: pCi/L LCL:70 UCL:130 RPD:20

JNV3N1AC-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JN6D61AA-BLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JN6D61AC-LCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By \_\_\_\_\_

Date: \_\_\_\_\_

2/26/2007 3:40:55 PM

## Sample Preparation/Analysis

Balance Id:1120482733,1120482733,1120

384868, Pacific Northwest National Laboratory ,  
Pacific Northwest National LabCL Sr-90 Prp/SepRC5006(5071)  
TL Sr-85 by Nal and Sr-90 by GPC 7 day ingrowth  
5I CLIENT: HANFORD

Pipet #: \_\_\_\_\_

AnalyDueDate: 03/16/2007

Sep1 DT/Tm Tech: 02/19/2007 15:41,ManisD





Batch: 7039542 WATER pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech: 02/26/2007 09:32,ManisD

SEQ Batch, Test: None

Prep Tech: ManisD

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On   Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JNPEH-1-AC J7A310377-1-SAMP 	1000.60g,in	SRTB14500 02/12/07,pd 09/11/06,r	0.8565	1.0	25.7	100	7A	0643	7/27/02		
02/19/2007 15:41;st, 02/26/2007											
01/31/2007 09:38 AmtRec: 20ML,3XLP,2X4LP #Containers: 6 Scr: Alpha: 3.34E-04 uCi/Sa Beta: 1.01E-03 uCi/Sa											
2 JNXLR-1-AG J7B050132-2-SAMP 	1008.00g,in	SRTB14501 02/12/07,pd 09/11/06,r	0.9707	1.0	25.5	100	7B	0643	7/27/02		
02/19/2007 15:41;st, 02/26/2007											
02/01/2007 09:01 AmtRec: 20ML,500MLP,5XLP,3X4LP #Containers: 10 Scr: Alpha: -3.53E-04 uCi/Sa Beta: -1.35E-03 uCi/Sa											
3 JNXLR-1-AM-X J7B050132-2-DUP 	993.40g,in	SRTB14502 02/12/07,pd 09/11/06,r	0.8562	1.0	25.2	100	7C	0643	7/27/02		
02/19/2007 15:41;st, 02/26/2007											
02/01/2007 09:01 AmtRec: 20ML,500MLP,5XLP,3X4LP #Containers: 10 Scr: Alpha: -3.53E-04 uCi/Sa Beta: -1.35E-03 uCi/Sa											
4 JNXMG-1-AE J7B050132-3-SAMP 	1006.50g,in	SRTB14503 02/12/07,pd 09/11/06,r	0.9453	1.0	25	100	1A	0643	7/27/02		
02/19/2007 15:41;st, 02/26/2007											
02/01/2007 10:15 AmtRec: 20ML,500MLP,5XLP,3X4LP #Containers: 9 Scr: Alpha: 1.40E-03 uCi/Sa Beta: -3.04E-04 uCi/Sa											
STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1 ISV - Insufficient Volume for Analysis WO Cnt: 4 Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added Prep_SamplePrep v4.8.26											

2/26/2007 3:40:57 PM

## Sample Preparation/Analysis

Balance Id:1120482733,1120482733,1120

CL Sr-90 Prp/SepRC5006(5071)

Pipet #: \_\_\_\_\_

TL Sr-85 by Nal and Sr-90 by GPC 7 day ingrowth

5I CLIENT: HANFORD

AnalyDueDate: 03/16/2007

Sep1 DT/Tm Tech: 02/19/2007 15:41,ManisD

Batch: 7039542


pCi/L

Sep2 DT/Tm Tech: 02/26/2007 09:32,ManisD


SEQ Batch, Test: None

Prep Tech: ,ManisD

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On   Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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5 JN6FA-1-AA-B		1000.50g,in	SRTB14504		1.0	25.5	100				
J7B080000-542-BLK			02/12/07,pd 09/11/06,r	0.8730				1B	0643	2/27/07	
								1B	0734	2/28/07	
02/19/2007 15:41,s1; 02/26/2007											

02/01/2007 09:01 AmtRec: #Containers: 1 Scr: Alpha: Beta:

6 JN6FA-1-AC-C		1004.00g,in	SRS1317		1.0	24.7	100				
J7B080000-542-LCS			02/06/07,pd 09/11/06,r	0.9563				1C	0643	2/27/07	
								1C	0734	2/28/07	
02/19/2007 15:41,s1; 02/26/2007											

02/01/2007 09:01 AmtRec: #Containers: 1 Scr: Alpha: Beta:

## Comments:

## All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

## JNPEH1AC-SAMP Constituent List:

Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20
JN6FA1AA-BLK:											
Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:	UCL:	RPD:
JN6FA1AC-LCS:											
Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20

## JNPEH1AC-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

## JN6FA1AA-BLK:

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2

ISV - Insufficient Volume for Analysis

WO Cnt: 6

Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Prep\_SamplePrep v4.8.26

2/16/2007 8:33:09 AM

## Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory  
Pacific Northwest National LabCL Sr-90 Prp/SepRC5006(5071)  
TL Sr-85 by NaI and Sr-90 by GPC 7 day ingrowth  
5I CLIENT: HANFORD

Pipet #:

DRM

AnalyDueDate: 03/16/2007 W05107

Sep1 DT/Tm Tech: 2/19/07 3:41:21 PM

Sep2 DT/Tm Tech: 2/20/07 9:32:25 AM

Batch: 7039542 WATER pCi/L


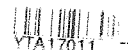
PM, Quote: SA, 57671

Prep Tech: BockJ



DRM

SEQ Batch, Test: None All Tests: 7039542 CLTL, 7039543 BNTB,


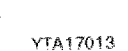
Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On   Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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1 JNPEH-1-AC J7A310377-1-SAMP	1000.60g,in	SRTB14500 02/12/07,pd 09/11/06,r	1.098 1.9825 0.8565				100	9"	1702	2/19/0700	
  VTA17011 Ex:1/3/2006											



01/31/2007 09:38 AmtRec: 20ML,3XLP,2X4LP #Containers: 6 Scr: Alpha: 3.34E-04 uCi/Sa Beta: 1.01E-03 uCi/Sa

2 JNXLR-1-AG J7B050132-2-SAMP	1008.00g,in	SRTB14501 02/12/07,pd 09/11/06,r	1.981 2.0407 0.9407					3"	1702	2/19/0700	
  VTA17012 Ex:1/3/2008											

02/01/2007 09:01 AmtRec: 20ML,500MLP,5XLP,3X4LP #Containers: 10 Scr: Alpha: -3.53E-04 uCi/Sa Beta: -1.35E-03 uCi/Sa

3 JNXLR-1-AM-X J7B050132-2-DUP	993.40g,in	SRTB14502 02/12/07,pd 09/11/06,r	1.741 2.0385 0.8563					9"	1739	2/19/0700	
  VTA17013 Ex:1/3/2008											

02/01/2007 09:01 AmtRec: 20ML,500MLP,5XLP,3X4LP #Containers: 10 Scr: Alpha: -3.53E-04 uCi/Sa Beta: -1.35E-03 uCi/Sa

4 JNXMG-1-AE J7B050132-3-SAMP	1006.50g,in	SRTB14503 02/12/07,pd 09/11/06,r	1.881 1.9898 0.9453					3"	1739	2/19/0700	
  VTA17014 Ex:1/3/2008											

02/01/2007 10:15 AmtRec: 20ML,500MLP,5XLP,3X4LP #Containers: 9 Scr: Alpha: 1.40E-03 uCi/Sa Beta: -3.04E-04 uCi/Sa

2/16/2007 8:33:11 AM

## Sample Preparation/Analysis

Balance Id:1120482733

CL Sr-90 Prp/SepRC5006(5071)  
TL Sr-85 by NaI and Sr-90 by GPC 7 day ingrowth  
5I CLIENT: HANFORD

Pipet #: \_\_\_\_\_

AnalyDueDate: 03/16/2007

Sep1 DT/Tm Tech:



Batch: 7039542

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On   Off (24hr) Circle	CR Analyst, Init/Date	Comments:
5 JN6FA-1-AA-B J7B080000-542-BLK 		1000.50g.in	SRTB14504 02/12/07,pd 09/11/06,r	1.850 2.0115 0.8430			100	9"	1815	2/19/0700	
02/01/2007 09:01 AmtRec: #Containers: 1 Scr: Alpha: Beta:											
6 JN6FA-1-AC-C J7B080000-542-LCS 		1004.00g.in	SRSG1317 02/06/07,pd 09/11/06,r	1.917 2.0045 0.9503				3"	1815	2/19/0700	
02/01/2007 09:01 AmtRec: #Containers: 1 Scr: Alpha: Beta:											

Comments: PH C2.0 93 2-16-07

## All Clients for Batch:

384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

## JNPEH1AC-SAMP Constituent List:

Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20
JN6FA1AA-BLK:											
Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:	UCL:	RPD:
JN6FA1AC-LCS:											
Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20

## JNPEH1AC-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

## JN6FA1AA-BLK:

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2  
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 6  
Prep\_SamplePrep v4.8.26



2/19/2007 11:24:21 AM

## Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,  
Pacific Northwest National Lab

AW Gamma PrpRC5017

TA Gamma by HPGE

5I CLIENT: HANFORD

Pipet #: \_\_\_\_\_

AnalyDueDate: 03/19/2007

Sep1 DT/Tm Tech:

Batch: 7039527 WATER






pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ/APA

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On   Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JNXLR-1-AD J7B050132-2-SAMP  02/01/2007 09:01	1956.20g,in									
<div style="display: flex; justify-content: space-between;"> <span>AmtRec: 20ML,500MLP,5XLP,3X4LP #Containers: 10</span> <span>Scr: Alpha: -3.53E-04 uCi/Sa Beta: -1.35E-03 uCi/Sa</span> </div>										
2 JNXLR-1-AJ-X J7B050132-2-DUP  02/01/2007 09:01	1952.80g,in									
<div style="display: flex; justify-content: space-between;"> <span>AmtRec: 20ML,500MLP,5XLP,3X4LP #Containers: 10</span> <span>Scr: Alpha: -3.53E-04 uCi/Sa Beta: -1.35E-03 uCi/Sa</span> </div>										
3 JNXMG-1-AA J7B050132-3-SAMP  02/01/2007 10:15	2007.70g,in									
<div style="display: flex; justify-content: space-between;"> <span>AmtRec: 20ML,500MLP,5XLP,3X4LP #Containers: 9</span> <span>Scr: Alpha: 1.40E-03 uCi/Sa Beta: -3.04E-04 uCi/Sa</span> </div>										
4 JN6DR-1-AA-B J7B080000-527-BLK  02/01/2007 09:01	1995.00g,in									
<div style="display: flex; justify-content: space-between;"> <span>AmtRec: #Containers: 1</span> <span>Scr: Alpha: Beta:</span> </div>										
5 JN6DR-1-AC-C J7B080000-527-LCS  02/01/2007 09:01	2001.50g,in		QCAG1336 01/23/07,pd 03/07/05,r							
<div style="display: flex; justify-content: space-between;"> <span>AmtRec: #Containers: 1</span> <span>Scr: Alpha: Beta:</span> </div>										

Comments:

PH &lt; 2.0 JS 2-19-07

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JNXLR1AD-SAMP Constituent List:

Co-60

RDL:0.00E+00

pCi/L

LCL:

UCL:

RPD:

Cs-134

RDL:0.00E+00

pCi/L

LCL:

UCL:

RPD:

STL Richland

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2

Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 5

Richland Wa.

pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Prep\_SamplePrep v4.8.26

2/28/2007 1:49:30 PM

## Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,  
Pacific Northwest National Lab

BN I-129 Prp/SepRC5025

TB Gamma by LEPD

Pipet #: \_\_\_\_\_

AnalyDueDate: 03/16/2007

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 7039543 WATER








pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ManisD,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On   Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JNPEH-1-AA J7A310377-1-SAMP 	3941.50g,in		ITA6053 02/20/07							
01/31/2007 09:38		AmtRec: 20ML,3XLP,2X4LP	#Containers: 6					Scr: Alpha: 3.34E-04 uCi/Sa	Beta: 1.01E-03 uCi/Sa	
2 JNXLQ-1-AA J7B050132-1-SAMP 	3898.70g,in		ITA6054 02/20/07							
02/01/2007 12:16		AmtRec: 20ML,2X4LP	#Containers: 3					Scr: Alpha: -1.54E-03 uCi/Sa	Beta: 1.17E-03 uCi/Sa	
3 JNXLR-1-AE J7B050132-2-SAMP 	3908.20g,in		ITA6055 02/20/07							
02/01/2007 09:01		AmtRec: 20ML,500MLP,5XLP,3X4LP	#Containers: 10					Scr: Alpha: -3.53E-04 uCi/Sa	Beta: -1.35E-03 uCi/Sa	
4 JNXMG-1-AC J7B050132-3-SAMP 	3925.80g,in		ITA6056 02/20/07							
02/01/2007 10:15		AmtRec: 20ML,500MLP,5XLP,3X4LP	#Containers: 9					Scr: Alpha: 1.40E-03 uCi/Sa	Beta: -3.04E-04 uCi/Sa	
5 JNXN2-1-AC J7B050154-3-SAMP 	3904.60g,in		ITA6057 02/20/07							
02/02/2007 09:53		AmtRec: 20ML,LP,2X4LP	#Containers: 4					Scr: Alpha: -5.79E-04 uCi/Sa	Beta: 1.85E-03 uCi/Sa	
6 JNXPG-1-AC J7B050158-1-SAMP 	3877.10g,in		ITA6058 02/20/07							
02/02/2007 08:46		AmtRec: 20ML,LP,2X4LP	#Containers: 4					Scr: Alpha: 5.92E-04 uCi/Sa	Beta: -1.12E-03 uCi/Sa	
7 JNXPQ-1-AC J7B050158-2-SAMP 	3851.30g,in		ITA6059 02/20/07							
02/02/2007 09:57		AmtRec: 20ML,LP,2X4LP	#Containers: 4					Scr: Alpha: 6.75E-04 uCi/Sa	Beta: -6.07E-05 uCi/Sa	

STL Richland  
Richland Wa.Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2  
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 7

ICOC v4.8.26

2/28/2007 1:49:31 PM

## Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory  
Pacific Northwest National Lab

BN I-129 Prp/SepRC5025

TB Gamma by LEPD

Pipet #: \_\_\_\_\_

AnalyDueDate: 03/16/2007

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 7039543 WATER








pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On   Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JNXPW-1-AC J7B050158-3-SAMP  02/02/2007 10:38		3872.20g,in	ITA6060 02/20/07							
		AmtRec: 20ML,LP,2X4LP	#Containers: 4				Scr:	Alpha: 8.94E-04 uCi/Sa	Beta: 5.79E-04 uCi/Sa	
9 JNXRL-1-AA J7B050162-1-SAMP  02/02/2007 11:52		3821.60g,in	ITA6061 02/20/07							
		AmtRec: 20ML,2X4LP	#Containers: 3				Scr:	Alpha: 1.58E-03 uCi/Sa	Beta: 1.36E-04 uCi/Sa	
10 JNXRL-1-AC-X J7B050162-1-DUP  02/02/2007 11:52		3770.70g,in	ITA6062 02/20/07							
		AmtRec: 20ML,2X4LP	#Containers: 3				Scr:	Alpha: 1.58E-03 uCi/Sa	Beta: 1.36E-04 uCi/Sa	
11 JNXR0-1-AC J7B050163-1-SAMP  02/02/2007 10:02		3935.10g,in	ITA6063 02/20/07							
		AmtRec: 20ML,LP,2X4LP	#Containers: 4				Scr:	Alpha: -1.56E-04 uCi/Sa	Beta: 4.69E-05 uCi/Sa	
12 JN6FC-1-AA-B J7B080000-543-BLK  02/02/2007 11:52		3997.00g,in	ITA6064 02/20/07							
		AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:	
13 JN6FC-1-AC-C J7B080000-543-LCS  02/02/2007 11:52		3964.30g,in	ISD0730 12/20/06							
		AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:	
14 JN6FC-2-AC-C J7B080000-543-LCS  02/02/2007 11:52		3964.3	ISD0730		39.4		L5	1214	3/1/07 RS	
		AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:	

2/16/2007 9:21:41 AM

## Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,  
Pacific Northwest National LabFP Tc-99 Prp/SepRC5065  
S5 Technetium-99 by Liquid Scint  
5I CLIENT: HANFORD

Pipet #: \_\_\_\_\_

AnalyDueDate: 03/19/2007 *W05107*

Sep1 DT/Tm Tech:








Batch: 7039528 WATER pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On   Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JNV4G-1-AC J7B020339-1-SAMP  02/01/2007 10:11			125.40g,in	125.40g		<i>60</i>				
			AmtRec: 20ML,500MLP,LP	#Containers: 3			Scr:	Alpha: -2.57E-04 uCi/Sa	Beta: 1.55E-04 uCi/Sa	
2 JNV4K-1-AA J7B020339-2-SAMP  02/01/2007 10:57			124.50g,in	124.50g						
			AmtRec: 20ML,500MLP	#Containers: 2			Scr:	Alpha: -7.68E-06 uCi/Sa	Beta: -8.40E-06 uCi/Sa	
3 JNXLR-1-AH J7B050132-2-SAMP  02/01/2007 09:01			125.30g,in	125.30g						
			AmtRec: 20ML,500MLP,5XLP,3X4LP	#Containers: 10			Scr:	Alpha: -3.53E-04 uCi/Sa	Beta: -1.35E-03 uCi/Sa	
4 JNXLR-1-AK-S J7B050132-2-MS  02/01/2007 09:01			124.50g,in	124.50g	TCSG1769 01/24/07,pd 01/10/06,r					
			AmtRec: 20ML,500MLP,5XLP,3X4LP	#Containers: 10			Scr:	Alpha: -3.53E-04 uCi/Sa	Beta: -1.35E-03 uCi/Sa	
5 JNXMG-1-AF J7B050132-3-SAMP  02/01/2007 10:15			125.70g,in	125.70g						
			AmtRec: 20ML,500MLP,5XLP,3X4LP	#Containers: 9			Scr:	Alpha: 1.40E-03 uCi/Sa	Beta: -3.04E-04 uCi/Sa	
6 JNXMG-1-AG-X J7B050132-3-DUP  02/01/2007 10:15			125.40g,in	125.40g						
			AmtRec: 20ML,500MLP,5XLP,3X4LP	#Containers: 9			Scr:	Alpha: 1.40E-03 uCi/Sa	Beta: -3.04E-04 uCi/Sa	
7 JN6D2-1-AA-B J7B080000-528-BLK  02/01/2007 09:01			126.10g,in	126.10g		<i>✓</i>				
			AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:	

2/16/2007 9:21:46 AM

## Sample Preparation/Analysis

Balance Id:1120482733

FP Tc-99 Prp/SepRC5065  
S5 Technetium-99 by Liquid Scint  
5I CLIENT: HANFORD

Pipet #: \_\_\_\_\_

AnalyDueDate: 03/19/2007

Sep1 DT/Tm Tech:



Batch: 7039528

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On   Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JN6D2-1-AC-C J7B080000-528-LCS  02/01/2007 09:01			126.10g,in	126.10g	TCSE2071 01/24/07,pd 01/10/06,r	60				
-----										
			AmtRec:	#Containers: 1			Scr:	Alpha:		Beta:
9 JN6D2-1-AD-BN J7B080000-528-IBLK  02/01/2007 09:01										
-----										
			AmtRec:	#Containers: 1			Scr:	Alpha:		Beta:

Comments: PH L2.0 JBZ-N-07

All Clients for Batch:  
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JNV4G1AC-SAMP Constituent List:  
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20  
JNXLR1AK-MS:

JN6D21AA-BLK:  
Tc-99 RDL:15 pCi/L LCL: UCL: RPD:  
JN6D21AC-LCS:  
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20  
JN6D21AD-IBLK:  
Tc-99 RDL:15 pCi/L LCL: UCL: RPD:

JNV4G1AC-SAMP Calc Info:  
Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B  
JNXLR1AK-MS:  
Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B  
JN6D21AA-BLK:  
Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B  
JN6D21AC-LCS:  
Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B  
JN6D21AD-IBLK:  
Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

2/16/2007 9:21:50 AM

### Sample Preparation/Analysis

Balance Id: \_\_\_\_\_

FP Tc-99 Prp/SepRC5065  
S5 Technetium-99 by Liquid Scint  
5I CLIENT: HANFORD

Pipet #: \_\_\_\_\_

AnalyDueDate: 03/19/2007

Sep1 DT/Tm Tech: \_\_\_\_\_

Batch: 7039528

pCi/L

Sep2 DT/Tm Tech: \_\_\_\_\_

SEQ Batch, Test: None

Prep Tech: \_\_\_\_\_



Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On   Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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Approved By \_\_\_\_\_

Date: \_\_\_\_\_

2/8/2007 3:31:10 PM

## Sample Preparation/Analysis

Balance Id:

12445

384868, Pacific Northwest National Laboratory  
Pacific Northwest National LabAR H-3 Prp/SepRC5007  
S6 Tritium by Liquid Scint  
5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 03/19/2007 605107

Sep1 DT/Tm Tech:

J21-070m

Batch: 7039533 WATER








pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On   Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JNV3J-1-AA J7B020323-1-SAMP  02/01/2007 10:49								
		AmtRec: 20ML,LP	#Containers: 2			Scr:	Alpha: 8.73E-05 uCi/Sa	Beta: -4.05E-05 uCi/Sa
2 JNV4G-1-AA J7B020339-1-SAMP  02/01/2007 10:11								
		AmtRec: 20ML,500MLP,LP	#Containers: 3			Scr:	Alpha: -2.57E-04 uCi/Sa	Beta: 1.55E-04 uCi/Sa
3 JNXNQ-1-AA J7B050153-1-SAMP  02/01/2007 09:23								
		AmtRec: 20ml,lp	#Containers: 2			Scr:	Alpha:	Beta:
4 JNXNT-1-AA J7B050154-1-SAMP  02/02/2007 08:59								
		AmtRec: 20ML,LP	#Containers: 2			Scr:	Alpha:	Beta:
5 JNXN0-1-AA J7B050154-2-SAMP  02/02/2007 08:59								
		AmtRec: 20ML,LP	#Containers: 2			Scr:	Alpha:	Beta:
6 JNXN2-1-AA J7B050154-3-SAMP  02/02/2007 09:53								
		AmtRec: 20ML,LP,2X4LP	#Containers: 4			Scr:	Alpha:	Beta:
7 JNXN3-1-AA J7B050154-4-SAMP  02/02/2007 12:07								
		AmtRec: 20ML,LP	#Containers: 2			Scr:	Alpha:	Beta:

2/8/2007 3:31:12 PM

## Sample Preparation/Analysis

Balance Id:

12445

384868, Pacific Northwest National Laboratory ,  
Pacific Northwest National LabAR H-3 Prp/SepRC5007  
S6 Tritium by Liquid Scint  
5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 03/19/2007

Sep1 DT/Tm Tech:

JH-OTW

Batch: 7039533 WATER







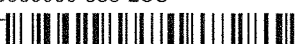
pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On   Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JNXPQ-1-AA								
J7B050158-1-SAMP								
								
02/02/2007 08:46		AmtRec: 20ML,LP,2X4LP	#Containers: 4			Scr:	Alpha:	Beta:
9 JNXPQ-1-AA								
J7B050158-2-SAMP								
								
02/02/2007 09:57		AmtRec: 20ML,LP,2X4LP	#Containers: 4			Scr:	Alpha:	Beta:
10 JNXPW-1-AA								
J7B050158-3-SAMP								
								
02/02/2007 10:38		AmtRec: 20ML,LP,2X4LP	#Containers: 4			Scr:	Alpha:	Beta:
11 JNXR0-1-AA								
J7B050163-1-SAMP								
								
02/02/2007 10:02		AmtRec: 20ML,LP,2X4LP	#Containers: 4			Scr:	Alpha:	Beta:
12 JNXR0-1-AD-X								
J7B050163-1-DUP								
								
02/02/2007 10:02		AmtRec: 20ML,LP,2X4LP	#Containers: 4			Scr:	Alpha:	Beta:
13 JN6ED-1-AA-B								
J7B080000-533-BLK								
								
02/02/2007 10:02		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
14 JN6ED-1-AC-C								
J7B080000-533-LCS								
								
02/02/2007 10:02		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:



2/8/2007 3:31:15 PM

## Sample Preparation/Analysis

Balance Id: 12445

AR H-3 Prp/SepRC5007  
S6 Tritium by Liquid Scint  
5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 03/19/2007

Sep1 DT/Tm Tech: 221-570m

Batch: 7039533

pCi/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On   Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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15 JN6ED-1-AD-BX

J7B080000-533-MBLK

02/02/2007 10:02	AmtRec:	#Containers: 1	Scr:	Alpha:	Beta:
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16 JN6ED-1-AE-CM

J7B080000-533-MLCS

02/02/2007 10:02	AmtRec:	#Containers: 1	Scr:	Alpha:	Beta:
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17 JN6ED-1-AF-BN

J7B080000-533-IBLK

02/02/2007 10:02	AmtRec:	#Containers: 1	Scr:	Alpha:	Beta:
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18 JN6ED-1-AG-BN

J7B080000-533-IBLK

02/02/2007 10:02	AmtRec:	#Containers: 1	Scr:	Alpha:	Beta:
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## Comments:

## All Clients for Batch:

384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

## JNV3J1AA-SAMP Constituent List:

H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
JN6ED1AA-BLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
JN6ED1AC-LCS:					
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
JN6ED1AD-MBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 3

ISV - Insufficient Volume for Analysis

WO Cnt: 18

Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ICOC v4.8.26

2/8/2007 3:31:21 PM

## Sample Preparation/Analysis

Balance Id: 12445

AR H-3 Prp/SepRC5007  
S6 Tritium by Liquid Scint  
5I CLIENT: HANFORD

Pipet #: \_\_\_\_\_

AnalyDueDate: 03/19/2007

Sep1 DT/Tm Tech: JH-OTM

Batch: 7039533

pCi/L

Sep2 DT/Tm Tech: \_\_\_\_\_

SEQ Batch, Test: None

Prep Tech: \_\_\_\_\_

<div>Prep Tech:</div>								
Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On   Off (24hr) Circle	CR Analyst, Init/Date	Comments:
JN6ED1AE-MLCS:								
H-3 RDL:400	pCi/L	LCL:70	UCL:130	RPD:20				
JN6ED1AF-IBLK:								
H-3 RDL:400	pCi/L	LCL:	UCL:	RPD:				
JN6ED1AG-IBLK:								
H-3 RDL:400	pCi/L	LCL:	UCL:	RPD:				
JNV3J1AA-SAMP Calc Info:								
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				
JN6ED1AA-BLK:								
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				
JN6ED1AC-LCS:								
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				
JN6ED1AD-MBLK:								
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				
JN6ED1AE-MLCS:								
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				
JN6ED1AF-IBLK:								
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				
JN6ED1AG-IBLK:								
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B				

Approved By \_\_\_\_\_

Date: \_\_\_\_\_

2/28/2007 4:28:00 PM

## Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,  
Pacific Northwest National Lab

DH UNat\_Laser PrpRC5015

SS Total Uranium by KPA

Pipet #: \_\_\_\_\_

AnalyDueDate: 03/19/2007

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 7039534

WATER








ug/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 7039534 DHSS, 7039539 7YSR,

Prep Tech: BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On   Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JNVW3-1-AA J7B020316-1-SAMP 02/01/2007 12:52	26.60g,in							
								
AmtRec: 20ML,500MLP	#Containers: 2		Scr: Alpha: 3.37E-04 uCi/Sa 2.7E-01L			Beta: -2.05E-04 uCi/Sa		
2 JNVW3-1-AC-S J7B020316-1-MS 02/01/2007 12:52	24.90g,in		UNSF3603 02/05/07,pd 01/23/07,r					
								
AmtRec: 20ML,500MLP	#Containers: 2		Scr: Alpha: 3.37E-04 uCi/Sa 2.7E-01L			Beta: -2.05E-04 uCi/Sa		
3 JNVW7-1-AC J7B020316-2-SAMP 02/01/2007 12:04	25.40g,in							
								
AmtRec: 20ML,500MLP,LP	#Containers: 3		Scr: Alpha: 4.98E-04 uCi/Sa			Beta: -3.30E-04 uCi/Sa		
4 JNVW7-1-AD-X J7B020316-2-DUP 02/01/2007 12:04	25.10g,in							
								
AmtRec: 20ML,500MLP,LP	#Containers: 3		Scr: Alpha: 4.98E-04 uCi/Sa			Beta: -3.30E-04 uCi/Sa		
5 JN6EX-1-AA-B J7B080000-534-BLK 02/01/2007 12:52	25.00g,in							
								
AmtRec:	#Containers: 1		Scr: Alpha:			Beta:		
6 JN6EX-1-AC-C J7B080000-534-LCS 02/01/2007 12:52	25.60g,in		UNSF3604 02/05/07,pd 01/23/07,r					
								
AmtRec:	#Containers: 1		Scr: Alpha:			Beta:		
7 JN6EX-1-AD-C J7B080000-534-LCS 02/01/2007 12:52	25.90g,in		UNSC1495 01/23/07,pd 04/28/06,r					
								
AmtRec:	#Containers: 1		Scr: Alpha:			Beta:		

STL Richland

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2

Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 7

Richland Wa.

pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Prep\_SamplePrep v4.8.26

2/28/2007 4:28:02 PM

## Sample Preparation/Analysis

Balance Id:na,1120482733,1120482733,na

DH UNat\_Laser PrpRC5015

Pipet #: \_\_\_\_\_

SS Total Uranium by KPA

AnalyDueDate: 03/19/2007

5I CLIENT: HANFORD

Sep1 DT/Tm Tech:

Batch: 7039534

ug/L

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot,  
Sample DateTimeTotal  
Amt/UnitInitial Aliquot  
Amt/UnitQC Tracer  
Prep DateCount  
Time MinDetector  
IdCount On | Off  
(24hr) CircleCR Analyst,  
Init/Date

Comments:

Comments:

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JNVW31AA-SAMP Constituent List:

Uranium RDL:1.44E-01 ug/L LCL: UCL: RPD:

JNVW31AC-MS Constituent List:

JN6EX1AA-BLK:

Uranium RDL:1.44E-01 ug/L LCL: UCL: RPD:

JN6EX1AC-LCS:

Uranium RDL:0.144343 ug/L LCL:70 UCL:130 RPD:20

JN6EX1AD-LCS:

Uranium RDL:0.144343 ug/L LCL:70 UCL:130 RPD:20

JNVW31AA-SAMP Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JNVW31AC-MS Calc Info:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JN6EX1AA-BLK:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JN6EX1AC-LCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JN6EX1AD-LCS:

Uncert Level (#s): 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By \_\_\_\_\_

Date: \_\_\_\_\_

2/21/2007 2:45:13 PM

## ICOC Fraction Transfer/Status Report

ByDate: 2/21/2006, 2/26/2007, Batch: '7039545', User: \*ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7039545				
AC	CalcC	BockJ	2/16/2007 10:08:52	
SC		andersonp	IsBatched 2/8/2007 3:38:22 PM	ICOC_RADCALC v4.8.26
SC		BockJ	InPrep 2/16/2007 10:08:52 AM	RICH-RC-5016 Revision 6
SC		BockJ	Prep1C 2/16/2007 10:14:32 AM	RICH-RC-5016 REVISION 6
SC		FABREM	Sep1C 2/19/2007 7:20:21 PM	RICH-RC-5010 REVISION 4
SC		FABREM	Sep2C 2/20/2007 4:08:13 PM	RICH-RC-5039 REV 5
SC		DAWKINSO	InCnt1 2/20/2007 5:35:14 PM	RICH-RD-0008 REVISION 4
SC		DAWKINSO	CalcC 2/20/2007 10:14:07 PM	RICH-RD-0008 REVISION 4
AC		BockJ	2/16/2007 10:14:32	
AC		FABREM	2/19/2007 7:20:21 PM	
AC		FABREM	2/20/2007 4:08:13 PM	
AC		DAWKINSO	2/20/2007 5:35:14 PM	
AC		DAWKINSO	2/20/2007 10:14:07	

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

2/27/2007 1:30:50 PM

# ICOC Fraction Transfer/Status Report

ByDate: 2/27/2006, 3/4/2007, Batch: '7039539', User: \*ALL Order By DateTimeAccepting

Q	Batch	Work	Ord	CurStatus	Accepting	Comments
<b>7039539</b>						
AC				<b>CalcC</b>	<b>BockJ</b> 2/20/2007 12:42:22	
SC				andersonp	IsBatched 2/8/2007 3:38:22 PM	ICOC_RADCALC v4.8.26
SC				BockJ	InPrep 2/20/2007 12:42:22 PM	RICH-RC-5016 Revision 6
SC				BockJ	Prep1C 2/20/2007 12:47:56 PM	RICH-RC-5016 REVISION 6
SC				HarveyK	InPrep2 2/20/2007 2:19:07 PM	RICH-RC-5086 REV2
SC				HarveyK	Sep1C 2/23/2007 8:17:34 AM	RICH-RC-5067 REV6
SC				FABREM	Sep2C 2/23/2007 4:52:53 PM	RICH-RC-5039 REV 5
SC				DAWKINSO	InCnt1 2/23/2007 6:10:46 PM	RICH-RD-0008 REVISION 4
SC				BlackCL	CalcC 2/26/2007 7:25:21 AM	RICH-RD-0008 REVISION 4
AC				<b>BockJ</b>	2/20/2007 12:47:56	
AC				<b>HarveyK</b>	2/20/2007 2:19:07 PM	
AC				<b>HarveyK</b>	2/23/2007 8:17:34	
AC				<b>FABREM</b>	2/23/2007 4:52:53 PM	
AC				<b>DAWKINSO</b>	2/23/2007 6:10:46 PM	
AC				<b>BlackCL</b>	2/26/2007 7:25:21	

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

2/27/2007 11:40:34 AM

## ICOC Fraction Transfer/Status Report

ByDate: 2/27/2006, 3/4/2007, Batch: '7039532', User: \*ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7039532				
AC	CalcC	BockJ	2/19/2007 8:40:58	
SC		andersonp	IsBatched 2/8/2007 3:32:34 PM	ICOC_RADCALC v4.8.26
SC		BockJ	InPrep 2/19/2007 8:40:58 AM	RICH-RC-5014 Revision 6
SC		BockJ	Prep1C 2/19/2007 8:45:54 AM	RICH-RC-5014 REVISION 6
SC		AshworthA	InPrep2 2/26/2007 9:31:39 AM	RICH-RC-5014 REVISION 6
SC		AshworthA	Prep2C 2/26/2007 7:20:13 PM	RICH-RC-5014 REVISION 6
SC		BlackCL	CalcC 2/27/2007 5:36:25 AM	RICH-RD-0003 REVISION 4
AC		BockJ	2/19/2007 8:45:54	
AC		AshworthA	2/26/2007 9:31:39	
AC		AshworthA	2/26/2007 7:20:13 PM	
AC		BlackCL	2/27/2007 5:36:25	

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

2/27/2007 11:05:38 AM

## ICOC Fraction Transfer/Status Report

ByDate: 2/27/2006, 3/4/2007, Batch: '7039531', User: \*ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7039531				
AC	CalcC	BockJ	2/19/2007 8:36:20	
SC		andersonp	IsBatched 2/8/2007 3:32:34 PM	ICOC_RADCALC v4.8.26
SC		BockJ	InPrep 2/19/2007 8:36:20 AM	RICH-RC-5014 Revision 6
SC		BockJ	Prep1C 2/19/2007 8:40:40 AM	RICH-RC-5014 REVISION 6
SC		AshworthA	InPrep2 2/26/2007 9:31:31 AM	RICH-RC-5014 REVISION 6
SC		AshworthA	Prep2C 2/26/2007 7:20:22 PM	RICH-RC-5014 REVISION 6
SC		DAWKINSO	CalcC 2/26/2007 10:36:49 PM	RICH-RD-0003 REVISION 4
AC		BockJ	2/19/2007 8:40:40	
AC		AshworthA	2/26/2007 9:31:31	
AC		AshworthA	2/26/2007 7:20:22 PM	
AC		DAWKINSO	2/26/2007 10:36:49	

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.



2/28/2007 9:46:02 AM

# ICOC Fraction Transfer/Status Report

ByDate: 2/28/2006, 3/5/2007, Batch: '7039542', User: \*ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
<b>7039542</b>				
AC		<b>CalcC</b>	<b>BockJ</b> 2/16/2007 8:23:11	
SC		andersonp	IsBatched 2/8/2007 3:38:22 PM	ICOC_RADCALC v4.8.26
SC		BockJ	InPrep 2/16/2007 8:23:11 AM	RICH-RC-5016 Revision 6
SC		BockJ	Prep1C 2/16/2007 8:36:48 AM	RICH-RC-5016 REVISION 6
SC		ManisD	InSep1 2/16/2007 9:13:25 AM	RICH-RC-5006 REV 6
SC		ManisD	Sep1C 2/19/2007 4:12:09 PM	RICH-RC-5006 REV 6
SC		DAWKINSO	InCnt1 2/19/2007 4:32:57 PM	RICH-RD-0007 REVISION 5
SC		DAWKINSO	Cnt1C 2/19/2007 8:52:27 PM	RICH-RD-0007 REVISION 5
SC		ManisD	Sep2C 2/26/2007 3:42:34 PM	RICH-RC-5071 REV 4
SC		DAWKINSO	InCnt2 2/26/2007 4:47:42 PM	RICH-RD-0003 REVISION 4
SC		BlackCL	CalcC 2/28/2007 7:53:38 AM	RICH-RD-0003 REVISION 4
AC		<b>BockJ</b>	2/16/2007 8:36:48	
AC		<b>ManisD</b>	2/16/2007 9:13:25	
AC		<b>DAWKINSO</b>	2/19/2007 4:32:57 PM	
AC		<b>DAWKINSO</b>	2/19/2007 8:52:27 PM	
AC		<b>ManisD</b>	2/26/2007 3:42:34 PM	
AC		<b>DAWKINSO</b>	2/26/2007 4:47:42 PM	
AC		<b>BlackCL</b>	2/28/2007 7:53:38	

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

2/22/2007 1:18:32 PM

## ICOC Fraction Transfer/Status Report

ByDate: 2/22/2006, 2/27/2007, Batch: '7039527', User: \*ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting		Comments
7039527					
AC		CalcC	BockJ	2/19/2007 11:13:35	
SC			andersonp	IsBatched 2/8/2007 3:32:34 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep 2/19/2007 11:13:35 AM	RICH-RC-5014 Revision 6
SC			BockJ	Prep1C 2/19/2007 11:24:27 AM	RICH-RC-5017 REVISION 5
SC			AshworthA	InPrep2 2/20/2007 11:18:37 AM	RICH-RC-5017 REVISION 4
SC			AshworthA	Prep2C 2/21/2007 6:41:53 PM	RICH-RC-5017 REVISION 4
SC			DAWKINSO	InCnt1 2/21/2007 8:40:42 PM	RICH-RD-0007 REVISION 5
SC			StringerR	CalcC 2/22/2007 10:47:36 AM	RICH-RD-0007 REVISION 5
AC			BockJ	2/19/2007 11:24:27	
AC			AshworthA	2/20/2007 11:18:37	
AC			AshworthA	2/21/2007 6:41:53 PM	
AC			DAWKINSO	2/21/2007 8:40:42 PM	
AC			StringerR	2/22/2007 10:47:36	

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

3/6/2007 10:04:05 AM

## ICOC Fraction Transfer/Status Report

ByDate: 3/6/2006, 3/11/2007, Batch: '7039543', User: \*ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting		Comments
7039543					
AC		CalcC	BockJ	2/23/2007 7:03:35	
SC			andersonp	IsBatched	2/8/2007 3:38:22 PM
SC			BockJ	InPrep	2/23/2007 7:03:35 AM
SC			BockJ	Prep1C	2/23/2007 7:54:22 AM
SC			BostedD	InSep1	2/23/2007 10:55:04 AM
SC			BostedD	Sep1C	2/26/2007 12:16:02 PM
SC			BlackCL	InCnt1	2/26/2007 12:33:48 PM
SC			BlackCL	CalcC	2/27/2007 7:38:11 AM
SC			StringerR	InCnt1	3/1/2007 10:29:59 AM
SC			StringerR	CalcC	3/1/2007 12:43:21 PM
AC			BockJ	2/23/2007 7:54:22	
AC			BostedD	2/23/2007 10:55:04	
AC			BostedD	2/26/2007 12:16:02	
AC			BlackCL	2/26/2007 12:33:48	
AC			BlackCL	2/27/2007 7:38:11	
AC			StringerR	3/1/2007 10:29:59	
AC			StringerR	3/1/2007 12:43:21 PM	

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

2/20/2007 4:06:21 PM

# ICOC Fraction Transfer/Status Report

ByDate: 2/20/2006, 2/25/2007, Batch: '7039528', User: \*ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
<b>7039528</b>				
AC		<b>CalcC</b>	<b>BockJ</b> 2/16/2007 9:12:00	
SC		andersonp	IsBatched 2/8/2007 3:32:34 PM	ICOC_RADCALC v4.8.26
SC		BockJ	InPrep 2/16/2007 9:12:00 AM	RICH-RC-5016 Revision 6
SC		BockJ	Prep1C 2/16/2007 9:21:58 AM	RICH-RC-5016 REVISION 6
SC		FABREM	Sep1C 2/19/2007 7:15:24 PM	RICH-RC-5065 REVISION 5
SC		DAWKINSO	InCnt1 2/19/2007 7:27:39 PM	RICH-RD-0001 REVISION 3
SC		BlackCL	CalcC 2/20/2007 12:18:25 PM	RICH-RD-0001 REVISION 3
AC		<b>BockJ</b>	2/16/2007 9:21:58	
AC		<b>BockJ</b>	2/16/2007 9:26:41	
AC		<b>FABREM</b>	2/19/2007 7:15:24 PM	
AC		<b>DAWKINSO</b>	2/19/2007 7:27:39 PM	
AC		<b>BlackCL</b>	2/20/2007 12:18:25	
AC: Accepting Entry; SC: Status Change				
STL Richland				
Richland Wa.				
Page 1				
Grp Rec Cnt: 6				
ICOCFractions v4.8.26				

2/23/2007 11:31:27 AM

## ICOC Fraction Transfer/Status Report

ByDate: 2/23/2006, 2/28/2007, Batch: '7039533', User: \*ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7039533				
AC	CalcC	McDowellID	2/21/2007 8:19:32	
SC		andersonp	IsBatched	2/8/2007 3:32:34 PM
SC		McDowellID	InSep1	2/21/2007 8:19:32 AM
SC		McDowellID	Sep1C	2/21/2007 2:34:14 PM
SC		StringerR	InCnt1	2/21/2007 2:45:30 PM
SC		BlackCL	CalcC	2/23/2007 6:15:18 AM
AC		McDowellID	2/21/2007 2:34:14 PM	ICOC_RADCALC v4.8.26
AC		StringerR	2/21/2007 2:45:30 PM	RICH-RC-5007 REVISION 6
AC		BlackCL	2/23/2007 6:15:18	RICH-RC-5007 REVISION 6
				RICH-RD-0001 REVISION 3
				RICH-RD-0001 REVISION 3

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

3/1/2007 8:37:54 AM

## ICOC Fraction Transfer/Status Report

ByDate: 3/1/2006, 3/6/2007, Batch: '7039534', User: \*ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7039534				
AC		Cnt1C	BockJ 2/20/2007 10:50:40	
SC		andersonp	IsBatched 2/8/2007 3:38:22 PM	ICOC_RADCALC v4.8.26
SC		BockJ	InPrep 2/20/2007 10:50:40 AM	RICH-RC-5016 Revision 6
SC		BockJ	Prep1C 2/20/2007 10:58:16 AM	RICH-RC-5015 REVISION 4
SC		AshworthA	InPrep2 2/26/2007 10:19:13 AM	RICH-RC-5015 REVISION 4
SC		AshworthA	Prep2C 2/27/2007 1:40:57 PM	RICH-RC-5015 REVISION 4
SC		NelsonT	Cnt1C 2/28/2007 4:58:10 PM	RICH-RC-5058 REV 7
AC		BockJ	2/20/2007 10:58:16	
AC		AshworthA	2/26/2007 10:19:13	
AC		AshworthA	2/27/2007 1:40:57 PM	
AC		NelsonT	2/28/2007 4:58:10 PM	

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.